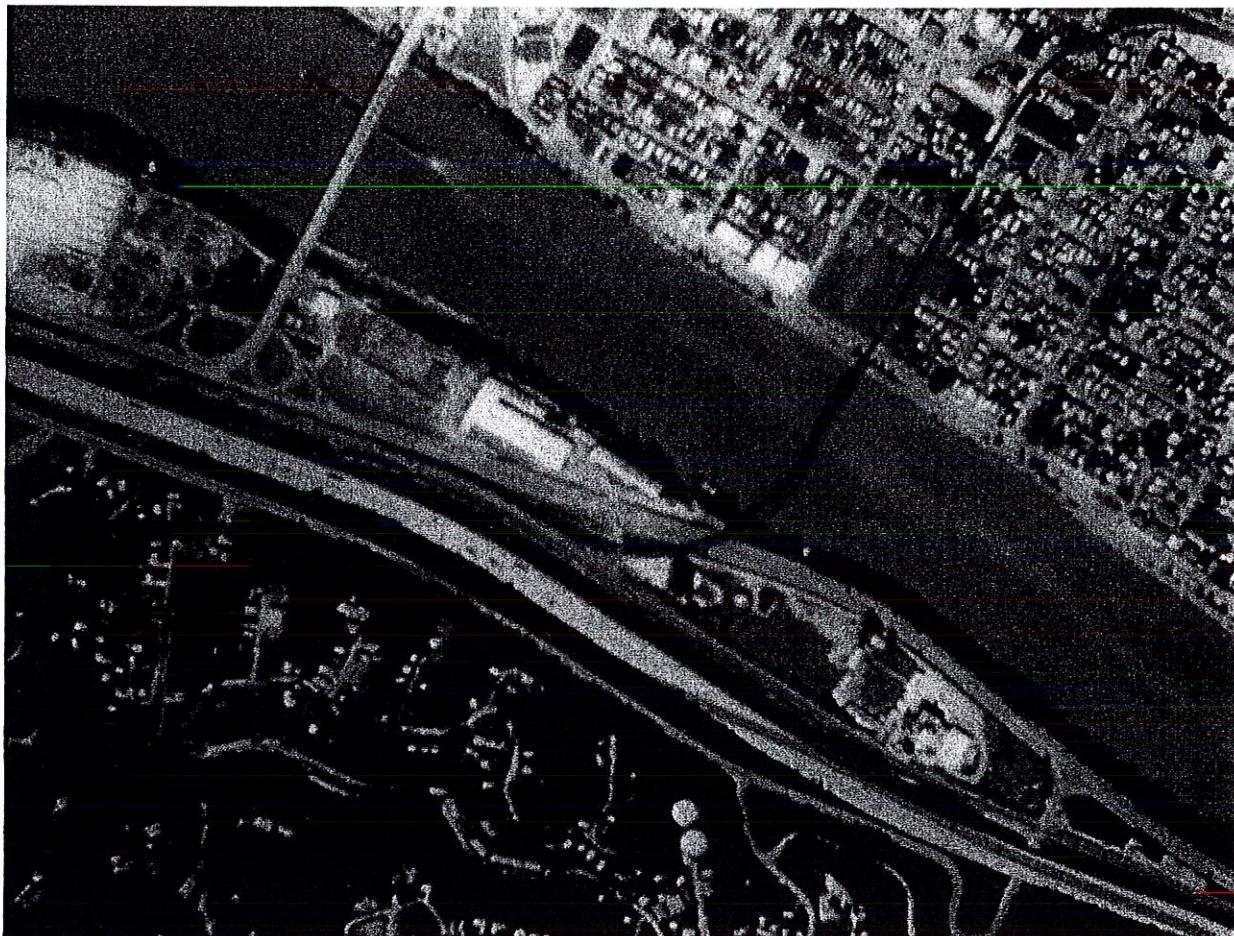


Kanawha River Bridge No. 4557
Charleston and South Charleston, West Virginia

PHASE I ENVIRONMENTAL SITE ASSESSMENT



TRIAD Project 04-04-0104

Submitted to:

**CSX Real Property, Inc.
301 West Bay Street, Suite 800
Jacksonville, Florida 32202**

Submitted by:



St. Albans, West Virginia

May 27, 2004



RECEIVED

MAY 28 2004

RPI
ENVIRONMENTAL

**Kanawha River Bridge No. 4557
Charleston, West Virginia and
South Charleston, West Virginia**

**PHASE I ENVIRONMENTAL SITE
ASSESSMENT**

TRIAD Project 04-04-0104

Submitted to:

**CSX Real Property, Inc.
301 West Bay Street, Suite 800
Jacksonville, FL 32202**

Submitted by:

**TRIAD ENGINEERING, INC.
St. Albans, West Virginia**

May 26, 2004

P.O. Box 1435
St. Albans, WV 25177
Phone (304) 755-0721
FAX (304) 755-1880



Triad Engineering, Inc.

May 26, 2004

Stacey S. Leitheiser
CSX Real Property, Inc.
301 West Bay Street, Suite 800
Jacksonville, FL 32202

Subject: **Phase I Environmental Site Assessment**
Proposed Sale of Kanawha Bridge No. 4557
Charleston and South Charleston, Kanawha County, West Virginia
CSX Transportation Contract No. ENV734 SSL
CSXT Project No. R001960

Dear Ms. Leitheiser:

Please find enclosed three copies of the *Phase I Environmental Site Assessment* (ESA) report for the Proposed Sale of Kanawha Bridge No. 4557, CSX Transportation PIN Numbers 54039 0087, 54039 0174, 54039 0175, 54039 0175, and 54039 0176. The properties evaluated under this Phase I ESA consist of the elevated wood and steel trestle and CSX Transportation, Inc. Right-of-Way (ROW), as well as associated properties. The Site consists of an approximate 1,500-linear foot "corridor" on the south side of the Kanawha River and an approximate 2,250-linear foot corridor on the north side of the Kanawha River in Charleston and South Charleston, Kanawha County, West Virginia.

We have appreciated the opportunity to assist you with this project. If you have any questions or need additional information, please feel free to contact us.

Sincerely,
TRIAD ENGINEERING, INC.

A handwritten signature of Julie C. Schaer.

Julie C. Schaer
Staff Geologist

A handwritten signature of Gregory E. Tieman.

Gregory E. Tieman, P.G., L.R.S.
Environmental Services Manager

encl

Triad Engineering, Inc.

Morgantown • St. Albans
West Virginia

Hagerstown
Maryland

Winchester • Harrisonburg • Purcellville
Virginia

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION.....	2
2.1	Purpose.....	2
2.2	Scope of Services	2
2.3	Significant Assumptions.....	3
2.4	Limitations and Exceptions	3
2.5	Special Terms and Conditions.....	4
2.6	User Reliance	4
3.0	SITE DESCRIPTION	5
3.1	Location and Legal Description	5
3.2	Site and Vicinity General Characteristics.....	5
3.2.1	South of Kanawha River	5
3.2.2	North of Kanawha River	6
3.3	Current Use of the Property.....	8
3.4	Descriptions of Structures, Roads, and Other Improvements on the Site.....	8
3.5	Current Uses of the Adjoining Properties.....	9
3.5.1	South of Kanawha River	9
3.5.2	North of Kanawha River	10
4.0	USER PROVIDED INFORMATION.....	10
4.1	Title Records	10
4.2	Environmental Liens or Activity and Use Limitations.....	10
4.3	Specialized Knowledge	10
4.4	Valuation Reduction for Environmental Issues	10
4.5	Owner, Property Manager, and Occupant Information	11
4.6	Reason for Performing Phase I ESA	11
4.7	Other.....	11
5.0	RECORDS REVIEW	11
5.1	Standard and Additional Environmental Record Sources	11
5.1.1	South of Kanawha River	11
5.1.2	North of Kanawha River	13
5.1.3	Orphan Sites	13
5.2	Physical Setting Sources	14
5.2.1	Soil Characteristics.....	14
5.2.2	Geologic Setting	14
5.2.3	Hydrogeologic Setting.....	14
5.2.4	Radon	14
5.2.5	Flood Plain	15
5.2.6	Wetlands.....	15
5.2.7	Water Wells and Public Water Supply Systems.....	15
5.3	Historical Use Information on the Property and Adjoining Properties.....	15
5.3.1	Aerial Photographs	16
5.3.2	Historical City Directories/Fire Insurance Maps	19
5.4	Other Historical Use Information.....	22

Table of Contents (Continued)

6.0	SITE RECONNAISSANCE.....	22
6.1	Methodology and Limiting Conditions	22
6.2	General Site Setting.....	23
6.3	Exterior Observations.....	23
6.4	Interior Observations.....	25
7.0	INTERVIEWS	25
7.1	Interview with Owner.....	25
7.2	Interview with Site Manager	25
7.3	Interviews with Occupants	26
7.4	Interviews with Local Government Officials	26
7.5	Interviews with Others	26
8.0	FINDINGS	26
9.0	OPINION	27
10.0	CONCLUSIONS AND RECOMMENDATIONS	27
11.0	ADDITIONAL SERVICES	27
12.0	REFERENCES.....	27

FIGURES (In Text)

FIGURE 1 Site Location Map
FIGURE 2 Site Boundaries

APPENDICES

APPENDIX A	EDR Records Review Report
APPENDIX B	Sanborn® Fire Insurance Maps
APPENDIX C	Environmental Professional Resumes
APPENDIX D	Site Photographs

1.0 EXECUTIVE SUMMARY

This report presents the results of a Phase I Environmental Site Assessment (ESA) performed by TRIAD ENGINEERING, INC. (TRIAD) on behalf of CSX Real Property, Inc. at the CSX Transportation, Inc. Kanawha River Bridge Number 4557 site. The “Proposed Sale Area” encompasses 5.49-acres, and has CSX Transportation, Inc. PIN Numbers 54039 0087, 54039 0174, 54039 0175, 54039 0175, and 54039 0176.

The Site consists of the elevated wood and steel trestle portions of the Kanawha River Bridge Number 4557 and its associated right-of-way (ROW) in Charleston and South Charleston, Kanawha County, West Virginia. The overall Site is bisected by the Kanawha River. The segment of the Site overlying the Kanawha River is not included within the scope of the Phase I ESA investigations. The southern portion of the Site (CSX Transportation PIN Number 54039-0087) is approximately 1,500-linear feet in length. The northern portion of the Site (CSX Transportation PIN Numbers 54039 0174, 54039 0175, and 54039 0176) is approximately 2,250-linear feet in length. The rail track and trestle is elevated a maximum of approximately 30-feet above ground surface.

Based on historic information, construction of the Kanawha Bridge Number 4557 was completed in 1907. At that time, the Kanawha River Bridge connected the Chesapeake & Ohio Railroad (C&O) double mainline track along the south side of the Kanawha River in South Charleston with the Kanawha & Michigan Railroad (now Norfolk Southern Corporation) single mainline track in Charleston, West Virginia. The Kanawha River Bridge was also used for local intercity passenger streetcar services from 1908 through mid-1939. The C&O (now CSX Transportation, Inc.) used the Site for rail transportation purposes from 1907 until recently. CSX Transportation, Inc. is currently evaluating donating the Site to the City of Charleston, West Virginia as part of the development of a proposed Rails-to-Trails recreational development in the Kanawha Valley.

Based on various historic records, land-use at these sections of Charleston and South Charleston has been a mix of commercial, industrial, and residential. Portions of the Site are located within the 100-year and 500-year flood plains of the Kanawha River. Overall, the ground surface beneath the trestles is relatively flat-lying and ground cover consists of mixed vegetation and asphalt. Based on site topography, both surface water and groundwater are projected to flow from the Site to the Kanawha River.

The findings of this Phase I ESA have revealed potential evidence of *recognized environmental conditions* potentially associated with former historic industrial and commercial land-uses at adjoining and adjacent properties. There is no evidence these historic land-uses have impacted environmental quality at the Site.

2.0 INTRODUCTION

2.1 Purpose

The purpose of this Phase I ESA was to identify *recognized environmental conditions* at the Site with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and *petroleum products*. Therefore, as defined in ASTM Practice E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*:

“this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner defense* to CERCLA liability: that is, the practices that constitute “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined in 42 USC §9601(35)(B).”

As further identified in ASTM Practice E 1527-00, the goal of the Phase I ESA is to identify *recognized environmental conditions*, which means:

“the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, groundwater, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not *recognized environmental conditions*.”

2.2 Scope of Services

TRIAD received Notice to Proceed from CSX Real Property, Inc. via e-mail on March 11, 2004 to perform the Phase I ESA work tasks at the portion of the Site located to the south of the Kanawha River in South Charleston (PIN Number 54039 0087). TRIAD received a second Notice to Proceed from CSX Real Property, Inc. to assess the portion of the Site located to the north of the Kanawha River in Charleston (PIN Numbers 54039 0174, 54039 0175, and 54039 0176) on April 15, 2004. TRIAD performed the components of the Phase I ESA as per our proposals dated March 10 and May 3, 2004, and in general accordance with the scope and limitations of ASTM Practice E 1527-00, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, unless otherwise described within this report. In general, there were no

significant deviations in the scope of services from ASTM Practice E 1527-00, except as may be described in Section 11.0 of this report.

As outlined in ASTM Practice E 1527-00, TRIAD reviewed reasonably ascertainable standard historical references that included United States Geological Survey (USGS) 7.5-minute topographic maps, historic aerial photographs, published historical reference material for Kanawha County, West Virginia, Sanborn® fire insurance maps, and environmental regulatory database information. TRIAD performed Site reconnaissance activities and obtained digital photographs to document current on-Site as well as off-Site conditions and to identify potential *recognized environmental conditions*.

This *Phase I Environmental Site Assessment* report documents the findings of our regulatory database records review, historical use information, and Site reconnaissance activities and has been prepared in general accordance with the provisions of ASTM Practice E 1527-00.

Our scope of services did not include assessing or testing for the potential presence of asbestos-containing materials, radon, lead-based paint, lead in drinking water, wetlands, ecological resources, and endangered species. Our scope of services did not include determining the regulatory compliance of the Site, the presence of cultural or historic resources, evaluating industrial hygiene, health and safety issues, indoor air quality, or high voltage powerlines. Finally, our scope of services did not include title research, surveying, or any other services not explicitly listed herein.

2.3 Significant Assumptions

TRIAD had sufficient access to inspect the Site; therefore, it is assumed that TRIAD could adequately inspect the Site in general accordance with ASTM Practice E 1527-00. Although TRIAD did not enter adjoining properties to inspect these properties for the presence of potential *recognized environmental conditions*, TRIAD was able to visually observe at a minimum the exterior portions of structures and associated exterior land-uses at the adjoining properties. Therefore, TRIAD assumed that adjoining land-uses were consistent with the activities that could be readily observed from the adjoining property boundaries or from public roads.

2.4 Limitations and Exceptions

This report has been prepared by TRIAD for the exclusive use of CSX Real Property, Inc. and CSX Transportation, Inc. and their assigns as a *Phase I Environmental Site Assessment* report on the subject property herein described as the Kanawha River Bridge No. 4557, CSX Transportation, Inc. PIN Numbers 54039 0087, 54039 0174, 54039 0175, and 54039 0176. The opinions and conclusions expressed in this report are based upon the results of our Phase I ESA work tasks.

For the purposes of this Phase I ESA, the terms "subject site," "subject property," and "Site" refer to the land within the property boundaries. The term "surrounding vicinity"

generally refers to properties within a one-mile radius of the Site. The term "adjoining properties" refers to land contiguous to the Site. The term "adjacent properties" refers to land proximal to the Site.

It is important to note that environmental evaluations are inherently limited in the sense that conclusions are drawn and recommendations developed from information obtained from limited research and Site evaluation. For these types of evaluations, it is often necessary to utilize information prepared by others and as such, TRIAD cannot be responsible for the accuracy of such information and we do not assume responsibility for conditions that were not divulged to us during the preparation of this report.

It should also be noted that our assessment is considered to be valid only at the time and locations investigated and that conditions within the Site may vary with time. The nature and extent of these variations may only become evident during the course of future investigations or development. This report was not and is not intended to establish the compliance status of the subject property with Federal, State, or Local environmental regulations.

We have performed our services in general accordance with ASTM Practice E 1527-00 for conducting a Phase I ESA and make no other warranty, either expressed or implied, as to the professional services and advice contained herein.

2.5 Special Terms and Conditions

TRIAD performed the Phase I ESA work tasks under contact to CSX Real Property, Inc. As such, there were no special terms and conditions in-place between CSX Real Property, Inc. and TRIAD with regard to the findings, recommendations, and our expressed opinion regarding *recognized environmental conditions* potentially associated with the Site.

2.6 User Reliance

TRIAD performed the Phase I ESA work tasks in general accordance with ASTM Practice E 1527-00, unless otherwise noted in this report. As such, the user may rely upon the findings and recommendations of the Phase I ESA report, subject to the scope of services, significant assumptions, limitations and exceptions, and special terms and conditions as described in the *Phase I Environmental Site Assessment* report. TRIAD emphasizes that this Phase I ESA does not guarantee that unobserved conditions, undocumented incidents, or information withheld concerning environmental conditions at the Site will not affect the level of environmental risk or potential liability at the Site.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The Site consists of the elevated wood and steel trestle portion of the CSX Transportation, Inc. Kanawha River Bridge Number 4557 and its associated right-of-way (ROW) in Charleston and South Charleston, Kanawha County, West Virginia. The overall Site is bisected by the Kanawha River, and the section of Kanawha River Bridge Number 4557 overlying the Kanawha River is not included within the scope of the Phase I ESA investigations.

The southern portion of the Site (CSX Transportation PIN Number 54039-0087) is located in South Charleston and is approximately 1,500-linear feet in length. The western terminus of this portion of the Site is its approximate junction with the CSX Transportation, Inc. rail yard located in South Charleston, West Virginia. The eastern terminus of this 1,500-linear foot portion of the Site is at the south bank of the Kanawha River.

The northern portion of the Site (CSX Transportation PIN Numbers 54039 0174, 54039 0175, and 54039 0176) is located in Charleston, West Virginia and is approximately 2,250-linear feet in length. The southern terminus of this portion of the Site is at the north bank of the Kanawha River. The northern terminus of this 2,250-linear foot portion of the Site is at its former junction with the Norfolk Southern Corporation single mainline track.

The ground surface within the ROW is included within the Site boundaries for purposes of this Phase I ESA. The location of the Site is depicted on the following page on the *Charleston West, W. VA*. United States Geological Survey (USGS) 7.5-minute topographic quadrangle (**Figure 1, Site Location**).

3.2 Site and Vicinity General Characteristics

Based on various historic records, land-use at these sections of Charleston and South Charleston has consisted of a mix of commercial, industrial, and residential uses since at least 1907 up through the present. Overall, land-use has been primarily industrial to the south of the Kanawha River and primarily residential and commercial to the north of the Kanawha River.

3.2.1 South of Kanawha River

Current and historic industrial and commercial land-use adjoining the Site to the south of the Kanawha River includes: 1.) former lead smelting, fabricating, and lead pigment manufacturing, 2.) former and current steel fabrication, 3.) former and current concrete and cement batch plant operations, 4.) former foundry operations, 5.) former automobile repair facility, 6.) warehousing and storage, 7.) former tannery related manufacturing, and

8.) former and current pharmaceutical manufacturing. A former residential area was present at this portion of South Charleston until it was demolished in the 1960's as part of the construction of Interstate I-64 to the south of the Site.

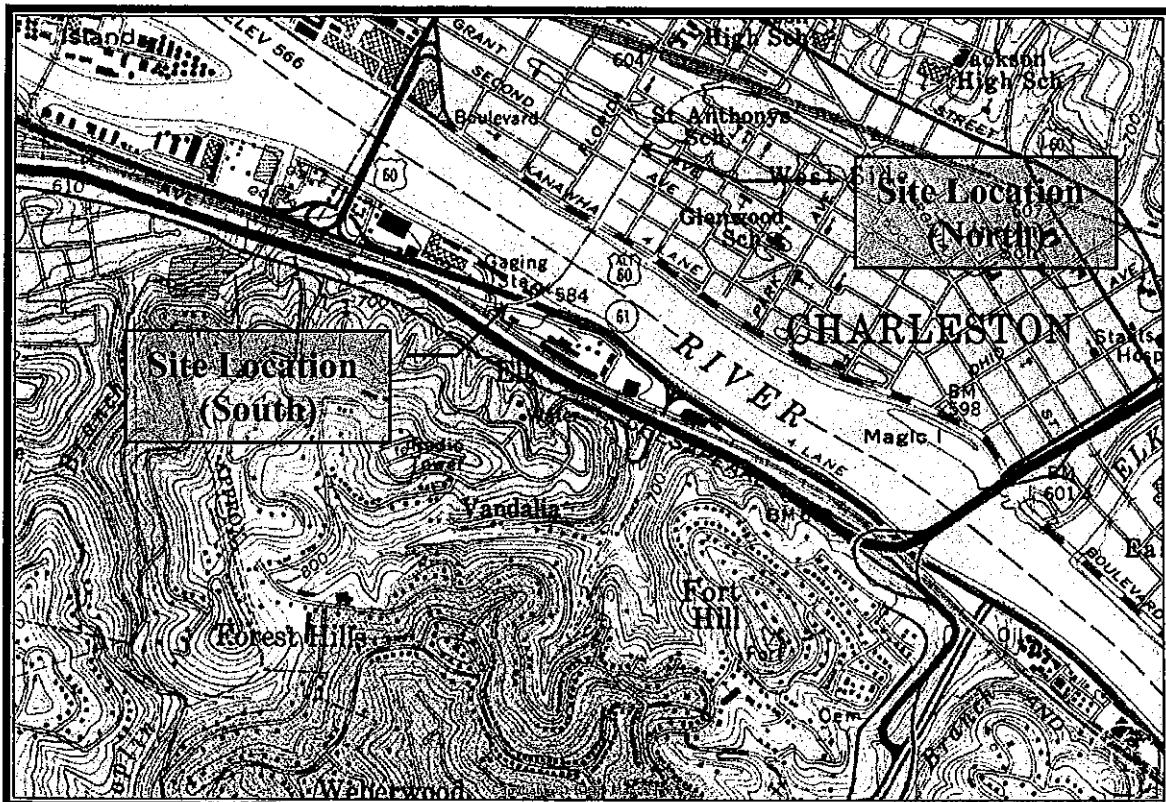


Figure 1, Site Location
CSX Transportation, Inc. Kanawha River Bridge Number 4557
Charleston West, West Virginia USGS 7.5-Minute Topographic Quadrangle

Portions of the Site are located within the boundaries of the 100-year and 500-year flood plains of the Kanawha River. Overall, the ground surface beneath the wood and steel trestle is relatively flat-lying and gently sloping. The Site is bisected by MacCorkle Avenue (U.S. Route 60), which is an east-west trending four-lane road that parallels the Kanawha River. Surface water runoff is to the north to the Kanawha River via overland runoff and/or subgrade piping. Ground cover consists of mixed vegetation and asphalt.

3.2.2 North of Kanawha River

Current and historic industrial and commercial land-use adjoining the Site to the north of the Kanawha River includes: 1.) former and current warehousing and storage, 2.) former and current automobile repair, 3.) miscellaneous retailing and commercial operations, 4.) office facilities, 5.) former beer bottling and machine shop operations, and 6.) current general contractor lay-down and vehicle storage areas. A former school and multiple residential areas are also located on properties adjoining the Site.

Portions of the Site to the north of the Kanawha River are also located within the boundaries of the 100-year and 500-year flood plains of the Kanawha River. Overall, the ground surface is also relatively flat-lying and gently sloping. The Site is bisected by various east-to-west trending asphalt streets, which are the Kanawha Boulevard West (four-lane), 2nd Street, Grant Street, Main Street, Central Avenue, and Sillman Street (now 6th Avenue). Surface water runoff is to the south to the Kanawha River via overland runoff and/or subgrade piping. Ground cover predominantly consists of mixed vegetation.

The boundaries of the Site both north and south of the Kanawha River are depicted on the *Proposed Sale of Bridge No. 4557* map, which was provided by CSX Real Property, Inc. to TRIAD. This map is reproduced below as **Figure 2, Site Boundaries**.

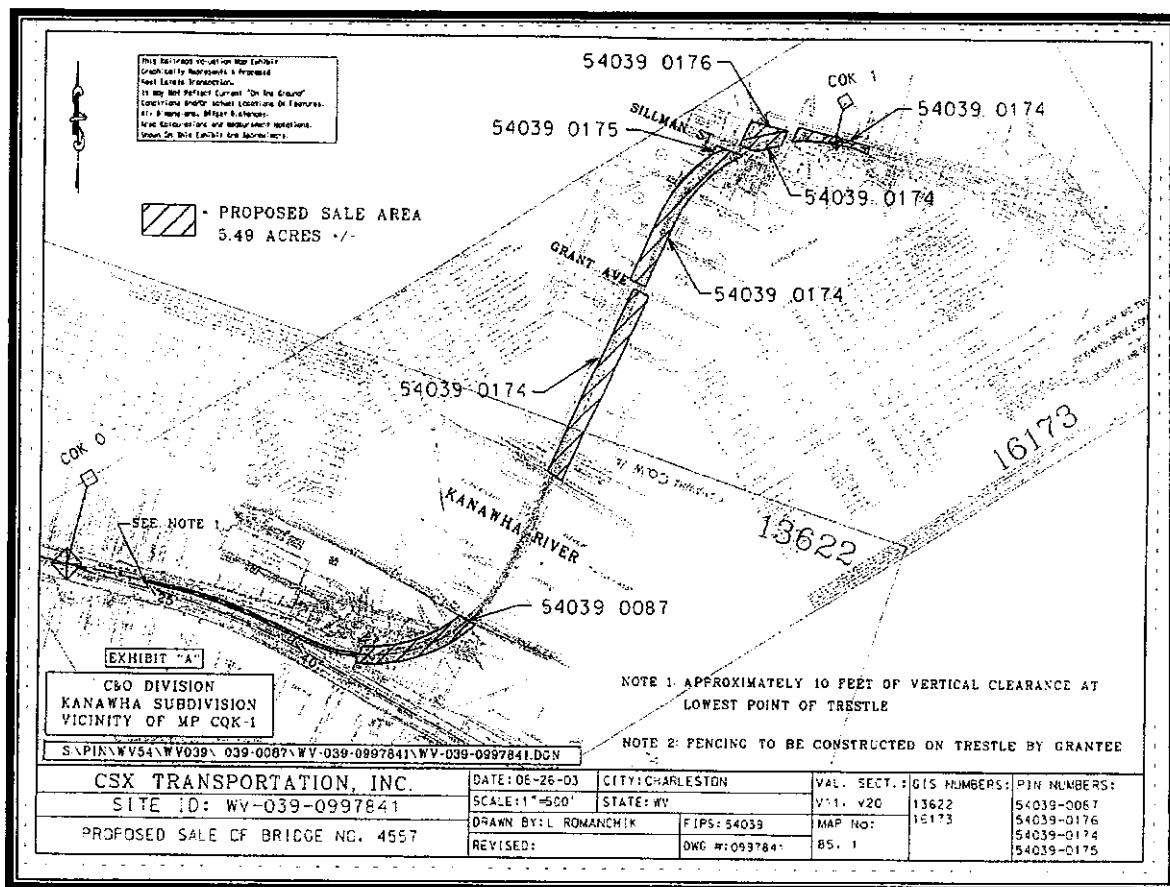


Figure 2, Site Boundaries
CSX Transportation, Inc.
CSX PIN Numbers 54039 0087, 54039 0174, 54039 0175, and 54039 0176

3.3 Current Use of the Property

The Site is currently owned by CSX Transportation, Inc. As depicted on **Figure 2, Site Boundaries**, the Kanawha River Bridge and associated trestle and track originally connected the CSX Transportation, Inc. double mainline track along the south side of the Kanawha River to the Norfolk Southern Corporation single mainline track to the north of the Kanawha River. The northern most portion of the CSX Transportation, Inc. track that had connected with the Norfolk Southern Corporation track has been removed. CSX Transportation, Inc. is not currently using the Site for active rail transportation purposes.

3.4 Descriptions of Structures, Roads, and Other Improvements on the Site

The C&O constructed the Kanawha River Bridge and its associated wood and steel trestle and single track in 1907. The following structures, roads, and improvements are currently present at the Site:

- The portions of the elevated trestle closest to either end of the Kanawha River Bridge Number 4557 are constructed of steel and are supported on steel piers, except for three concrete piers that were constructed in 1956 during construction of MacCorkle Avenue beneath the trestle on the south side of the Kanawha River.
- Multiple public asphalt east-to-west trending roads are located beneath the trestle. The four-lane roads are MacCorkle Avenue and Kanawha Boulevard West. The two-lane roads are 2nd Street, Grant Street, Main Street, Central Avenue, and Sillman Street (now 6th Avenue).
- The remaining portions of the trestle to the north and south of the Kanawha River are constructed of treated wood on timber piers.
- Advertising billboards owned by Kanawha Valley Advertising (KVA) and associated electrical service lines appear to be located at several locations within the ROW.
- An asphalt access road for Elementis Specialties, Inc. and the Kosmos Portland Cement, Charleston Terminal facility crosses beneath the steel trestle.
- A United States Geological Survey (USGS) stream gauging station is located at the south side of the Kanawha River, potentially within the boundaries of the ROW.
- An at-grade concrete and steel storm water energy dissipater is located beneath a section of the wood trestle. Storm water from the south of the Site flows from Interstate I-64 through subgrade concrete piping beneath the CSX Transportation, Inc. double mainline track and then discharges to this structure

beneath the wood trestle. The storm water then flows north through a second subgrade line to a culvert that flows beneath MacCorkle Avenue and north to the Kanawha River for discharge.

- A Cabot Oil and Gas Company – Cranberry Pipeline (800 642-0300) natural gas pipeline crosses beneath the steel trestle. An electrical rectifier (RIO Engineering Company) that would appear to be associated with the corrosion control system for this pipeline is located within a chain link fence enclosure beneath the steel trestle.

3.5 Current Uses of the Adjoining Properties

The current land-uses of the properties that are immediately adjoining to the Site are as follows:

3.5.1 South of Kanawha River

North. The Site is bounded to the north by MacCorkle Avenue and the former Trojan Steel Company steel fabricating facility. Trojan Steel Company recently closed and is now being commercially operated for off-season, winter recreational boat storage. The facility is now known as Trojan Landing. The Kanawha River is located to the immediate north of the former Trojan Steel Company facility.

Based on our interpretation of the local hydrology, this facility would most likely be located hydraulically downgradient of the Site, with discharge of both surface water and groundwater to the north to the Kanawha River.

South. The CSX Transportation, Inc. double mainline track is located to the immediate south of the Site. Further to the south is Interstate I-64. The double mainline track and Interstate I-64 would most likely be hydraulically upgradient of the Site.

Southeast. The Site is bounded to the southeast by the Kosmos Portland Cement, Charleston Terminal facility at 1007 MacCorkle Avenue. Three cement silos with a capacity of 62,000 barrels are present at this property. Further to the east-southeast is the Elementis Specialties, Inc. pharmaceutical manufacturing facility at 1003 MacCorkle Avenue. The Kosmos Portland Cement, Charleston Terminal would likely be located hydraulically upgradient of the Site. The Elementis Specialties, Inc. facility may be located hydraulically upgradient of the Site.

West. The Site is bounded to the west by the CSX Transportation, Inc. rail yard located in South Charleston. This facility would not be expected to be located hydraulically upgradient of the Site.

Northwest. The Site is bounded to the northwest by MacCorkle Avenue. A commercial and retail complex is located further to the northwest of MacCorkle Avenue. Charleston Marine, Inc., and the Patrick Street Bridge, which crosses the Kanawha River are located

to the west of the commercial and retail complex. These facilities would be expected to be located hydraulically downgradient of the Site.

3.5.2 North of Kanawha River

North. The Site is bounded to the north by the Norfolk Southern Corporation single mainline track. Further to the north, land use is primarily residential and commercial.

South. The Site is bounded to the south by the Kanawha River.

East. The Site is bounded to the east primarily by residential properties; although, miscellaneous commercial and retail facilities are located at Main Street, Central Avenue, and 6th Avenue. It would not appear that these facilities are located hydraulically upgradient of the Site. In addition, a contractor is storing port-a-johns on the ROW to the south of Central Avenue.

West. The Site is bounded to the west primarily by residential properties; although miscellaneous commercial and retail facilities are also located at Main Street, Central Avenue, and 6th Avenue. It would not appear that these facilities are located hydraulically upgradient of the Site. In addition, a contractor is stockpiling soil on property immediately adjoining the ROW.

4.0 USER PROVIDED INFORMATION

4.1 Title Records

CSX Real Property, Inc. has provided information concerning the Site boundaries to be investigated as part of the Phase I ESA work activities. This information was reproduced in this report as **Figure 2, Site Boundaries**.

4.2 Environmental Liens or Activity and Use Limitations

TRIAD is unaware of any environmental liens against the property. The Site is posted with "No Trespassing" signs and any Site activity and use is restricted by CSX Transportation, Inc. to only authorized uses by or on behalf of CSX Transportation, Inc.

4.3 Specialized Knowledge

Specialized knowledge regarding the history and/or use of the Site is not applicable to this Phase I ESA.

4.4 Valuation Reduction for Environmental Issues

TRIAD is unaware of any reduction in the value of the property due to actual or perceived environmental issues.

4.5 Owner, Property Manager, and Occupant Information

CSX Real Property, Inc. (Owner) has provided background information regarding the Site. Site-specific property manager and occupant information is not applicable to this Phase I ESA.

4.6 Reason for Performing Phase I ESA

CSX Transportation, Inc. is currently evaluating donating the Site to the City of Charleston, West Virginia as part of the development of a proposed Rails-to-Trails recreational development in Kanawha County, West Virginia.

4.7 Other

No other additional or miscellaneous information was provided to TRIAD by CSX Real Property, Inc. or CSX Transportation, Inc. as part of the Phase I ESA work tasks.

5.0 RECORDS REVIEW

TRIAD obtained and reviewed various standard and additional environmental records and historical use information that were reasonably ascertainable and available for review to help identify potential *recognized environmental conditions* in connection with the Site.

5.1 Standard and Additional Environmental Record Sources

TRIAD contracted with Environmental Data Resources, Inc. (EDR) to provide both standard and additional environmental records from Federal and State databases to obtain information regarding potential *recognized environmental conditions* within the approximate minimum search distances specified within ASTM Practice E 1527-00. Because the Kanawha River bisects the Site into northern and southern segments, two separate database searches were performed. The report to the south of the Kanawha River was generated on March 16, 2004, and the report to the north of the Kanawha River was generated on April 30, 2004.

Due to the “corridor” shape of the Site, the ASTM specified search distances were extended by ¼-mile so that all portions of the Site would fall within the minimum specified ASTM search distances. The EDR database reports are included as **Appendix A, EDR Records Review Reports**.

5.1.1 South of Kanawha River

EDR “plotted” the locations of 87 database targets within the ASTM specified search distances. Sixty-five of these targets are located on the north side of the Kanawha River; therefore, they are physically and hydraulically separated from the southern portion of the Site by the Kanawha River and would not be expected to represent a *recognized environmental condition* relative to this portion the Site. These 65 targets are addressed in the records review discussion of the northern portion of the Site in *Section 5.1.2* of this report.

The remaining 22 targets were located either within the Kanawha River or were located on the south side of the Kanawha River. Based on our interpretation of the expected surface and subsurface direction of water flow at the Site (to the north or northwest with discharge to the Kanawha River), the following "plotted" targets may be located either hydraulically upgradient of the Site or in close proximity to the Site and have a reasonable likelihood of representing a *recognized environmental condition* relative to the Site. These facilities are as follows:

Elementis Specialties Inc.

Elementis Specialties Inc. is located approximately 850-feet to the southeast of the Site at 1003 MacCorkle Avenue. Both a UST and a LUST were identified at this facility. The 8,000-gallon diesel UST was reportedly closed and removed in June 2003. It appears Elementis Specialties, Inc. was issued Leak Number 03-036 by the West Virginia Department of Environmental Protection (WVDEP) in 2003, potentially in response to the closure of the 8,000-gallon diesel UST.

Rheox Inc.

Rheox Inc. was also located approximately 850-feet to the southeast of the Site at 1003 MacCorkle Avenue, and was a predecessor company at the current Elementis Specialties, Inc. location. Two USTs were identified at this location. A 4,500-gallon UST was closed and removed in December 1990, and a second 2,000-gallon gasoline UST was closed in-place in December 1990.

Kosmos Cement Company and Kosmos Cement Company, Charleston Terminal

The Kosmos Cement Company and Kosmos Cement Company, Charleston Terminal is located at 1007 MacCorkle Avenue approximately 575-feet to the south/southeast of the Site. One 6,000-gallon gasoline UST was closed and removed in December 1989.

Trojan Steel Company

The former Trojan Steel Company is located approximately 575-feet to the immediate north/northwest of the Site. Although, this facility would most likely be located hydraulically downgradient of the Site, it is an immediately adjoining facility and might have a reasonable likelihood of representing a *recognized environmental condition* relative to the Site.

The Trojan Steel Company was identified as a RCRIS, SQG with six violations reported. In addition, the facility was issued Leak Number 97-099 under the LUST program in 1999. Finally, two USTs were identified. A 2,000-gallon gasoline UST and a 4,000-gallon diesel UST were both closed and removed in 1997. It would seem probable that the Leak Number was issued by WVDEP in response to the 1997 UST closure activities.

5.1.2 North of Kanawha River

EDR “plotted” the locations of 111 database targets within the ASTM specified search distances. Twenty-three of these targets are located on the south side of the Kanawha River; therefore, they are physically and hydraulically separated from this portion the Site by the Kanawha River and would not be expected to represent a *recognized environmental condition* relative to the this portion of the Site. These 23 targets are addressed in the records review discussion of the southern portion of the Site in *Section 5.1.1* of this report.

The remaining 88 targets were located either within the Kanawha River or were located on the north side of the Kanawha River. Based on our interpretation of the expected surface and subsurface direction of water flow at the Site (to the south or southwest with discharge to the Kanawha River), the following “plotted” targets may be located either hydraulically upgradient of the Site or in close proximity to the Site and have a reasonable likelihood of representing a *recognized environmental condition* relative to the Site. These facilities are as follows:

Birch Moving & Storage

Birch Moving & Storage is located approximately 100-feet to the east of the Site at 1129 Main Street. A UST was identified at this facility, though the EDR report did not identify the substance stored. The 2,000-gallon UST was reportedly closed and removed in June 1999.

Capitol Beverage Company

Capitol Beverage Company is located approximately 140-feet to the southeast of the Site at 500 Hunt Avenue. Two USTs were identified at this location. A 2,000-gallon diesel UST was closed and removed in July 1992, and a second 2,000-gallon gasoline UST was also closed and removed in July 1992.

Florida Street Sunoco

Florida Street Sunoco is located approximately 100-feet to the west of the Site at 1144 Central Avenue. Five USTs were identified at this location including three 8,000-gallon gasoline USTs, a 550-gallon used oil UST, and a 1,000-gallon UST substance unknown. The ownership and closure status of these USTs is also unknown.

The Florida Street Sunoco is located to the immediate west of the Site. Although, this facility may not be located hydraulically downgradient of the Site, it is in close proximity and might have a reasonable likelihood of representing a *recognized environmental condition* relative to the Site.

5.1.3 Orphan Sites

In addition to the above noted “plotted” targets, EDR identified 98 “Orphan Sites” located to the north and south of the Kanawha River, where EDR did not have sufficient

information to precisely “plot” their location. Many of these Orphan Sites are located several miles from the Site. Based on review of the Orphan Sites database and the site reconnaissance activities, there is no indication that these sites were located on either the north or south sides of the Kanawha River within the minimum search distances specified under ASTM Practice E 1527-00. Therefore, it does not appear that the “Orphan Sites” represent a potential *recognized environmental condition* relative to the Site.

5.2 Physical Setting Sources

5.2.1 Soil Characteristics

Based on the United States Department of Agriculture, Soil Conservation Service (SCS) *Soil Survey of Kanawha County, West Virginia* (1981), soil at the Site is classified as Udorthent Urban land complex (UC). The Udorthent soil type is found in steep to nearly level areas that are uplands, terraces, or floodplains. The Urban land component of this soil complex is found in areas covered by buildings or man-made land cover that prevent soil classification. The soil physical characteristics, such as drainage and permeability, tend to vary over a wide range and should be evaluated on a site-by-site basis.

5.2.2 Geologic Setting

The Site is located on Quaternary alluvium of the Kanawha River. Based on the West Virginia Geological and Economic Survey, *Geologic Map of West Virginia* (1968), the underlying geology at the Site consists of Pennsylvanian age rock of the Conemaugh Series. The Conemaugh Series is composed primarily of thick units of shale and massive sandstone with a few limestone and coal seams interspersed. The Conemaugh Series is most easily identified by the reddish color of the shale beds, commonly called “red beds.” These red shale units dominate the upper three-quarters of this series and can be seen outcropping along nearby sections of Interstate I-64.

5.2.3 Hydrogeologic Setting

Based on our knowledge and understanding of the subsurface geology and hydrogeology at this portion of the Kanawha River Valley, the overlying unconsolidated Quaternary alluvium consists of a mix of clay, silt, and sand sized particles placed in alternating layers. The thickness of this unconsolidated alluvium ranges in thickness from approximately 45-feet to 60-feet and overlies the underlying fractured bedrock. Perched groundwater is often encountered in this overlying material, often at relatively shallow depths. The confined to semi-confined groundwater potentiometric surface would be expected to be encountered at depths of approximately 20-feet to 30-feet below ground surface, most likely associated with a silty sand to sand layer. The direction of groundwater flow would be to the Kanawha River, which would represent both the local and regional base level at the Site.

5.2.4 Radon

A site-specific radon investigation was not within the scope of work for this Phase I ESA project. Furthermore, no enclosed structures are present at the Site. The Geocheck®

report provided by EDR identified 70 sites within the 25303 zip code that have been tested for radon. Of these sites, 60 (85.71%) have concentrations of radon that are less than 4 picoCuries per Liter (pCi/L). The remaining 10 sites (14.29%) range from 4 pCi/L up to 50 pCi/L. Based on the information provided in the Geocheck® report, it is unclear whether concentrations of radon within structures would exceed 4 pCi/L. However, since no enclosed structures are currently present or are envisioned to be constructed at the Site, it would not appear that radon represents a potential *recognized environmental condition* at the Site.

5.2.5 Flood Plain

A site-specific flood plain evaluation with associated surveying and elevation certification was not within the scope of work for this Phase I ESA project. However, information provided by EDR in the Geocheck® portion of the environmental database records review indicates that portions of the Site are located within the boundaries of the 100-year and 500-year floodplains of the Kanawha River, as mapped by the Federal Emergency Management Agency (FEMA). EDR identified the FEMA flood plain panel for the Site as 5400730004C.

5.2.6 Wetlands

A site-specific wetlands evaluation with associated field delineation was not within the scope of work for this Phase I ESA project. However, based on information provided by EDR in the Geocheck® portion of the environmental database records review, no “Federal Wetlands” are present at the Site. EDR accessed the United States Fish & Wildlife Services National Wetland Inventory (NWI) to identify mapped “Federal Wetlands.”

5.2.7 Water Wells and Public Water Supply Systems

The Geocheck® report provided by EDR identified eight groundwater wells in the USGS database that are located within one-mile of the Site. Based on the well locations relative to the Site, there does not appear to be the potential for the Site to impact any of the eight wells. EDR did not identify any public water supply (PWS) systems within one mile of the Site. Therefore, it would not appear that any potential *recognized environmental conditions* at the Site would represent an environmental concern to downgradient water wells and public water supply systems.

5.3 Historical Use Information on the Property and Adjoining Properties

TRIAD reviewed various reasonably ascertainable historical sources of information to develop a history of the previous uses of the Site and the adjoining properties to evaluate potential *recognized environmental conditions* and *historical recognized environmental conditions*. The historical use information sources include historic aerial photographs, Sanborn® fire insurance maps; and published reference material. The results of this review are summarized below.

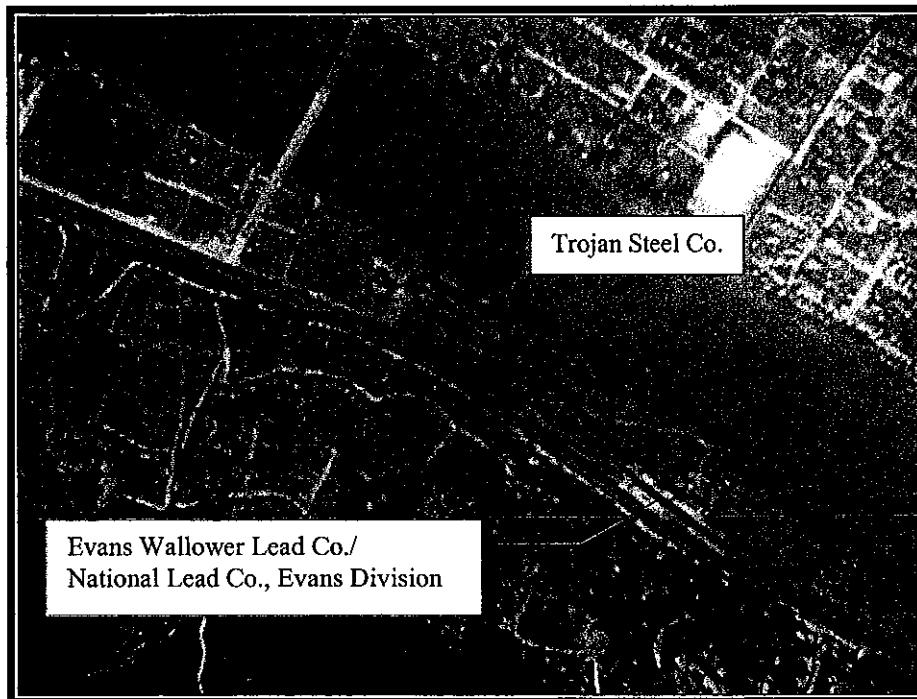
5.3.1 Aerial Photographs

TRIAD reviewed historic aerial photographs on March 22, 2004 that are available at the Kanawha/Putnam County Natural Resource Conservation Service (NRCS) for the following dates: 1938, 1957, 1970, 1990, and 1996. The aerial photographs are included in the report text on the following pages as *Aerial Photographs 1 through 5*.

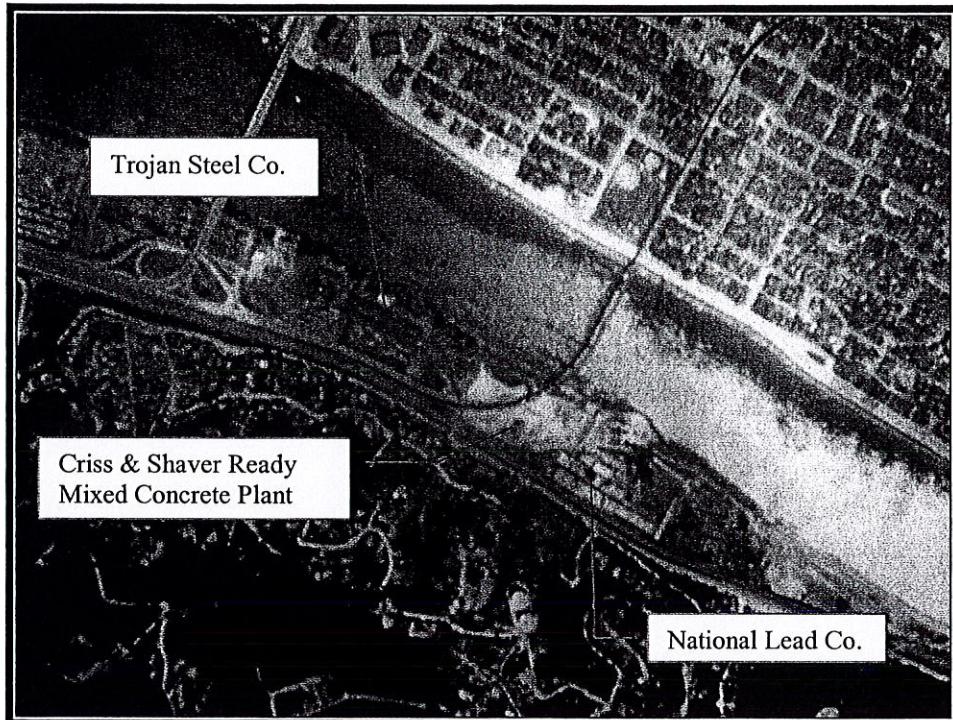
The Kanawha River, the Site boundaries, the Kanawha River Bridge, the CSX Transportation, Inc. double mainline track, the Norfolk Southern Corporation single mainline track, and immediately adjoining historic land-uses are illustrated on the aerial photographs. Furthermore, the locations of the following adjoining industrial facilities can be identified:

- Former Trojan Steel Company.
- Former Evans Wallower Lead Company and the National Lead Company, Evans Division facility.
- Criss & Shaver Ready Mixed Concrete Plant, Marquette Cement Company, and the Kosmos Cement Company property.

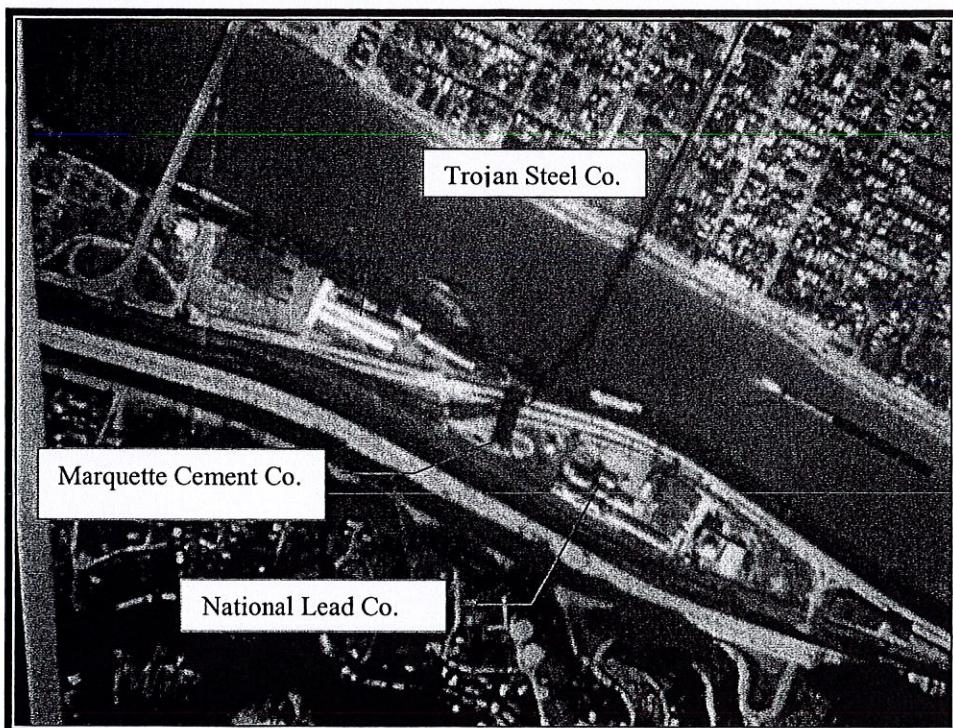
Finally, the aerial photographs document the overall industrial and commercial nature of the section of South Charleston to the south of the Kanawha River, as well as the overall commercial and residential nature of Charleston to the north of the Kanawha River.



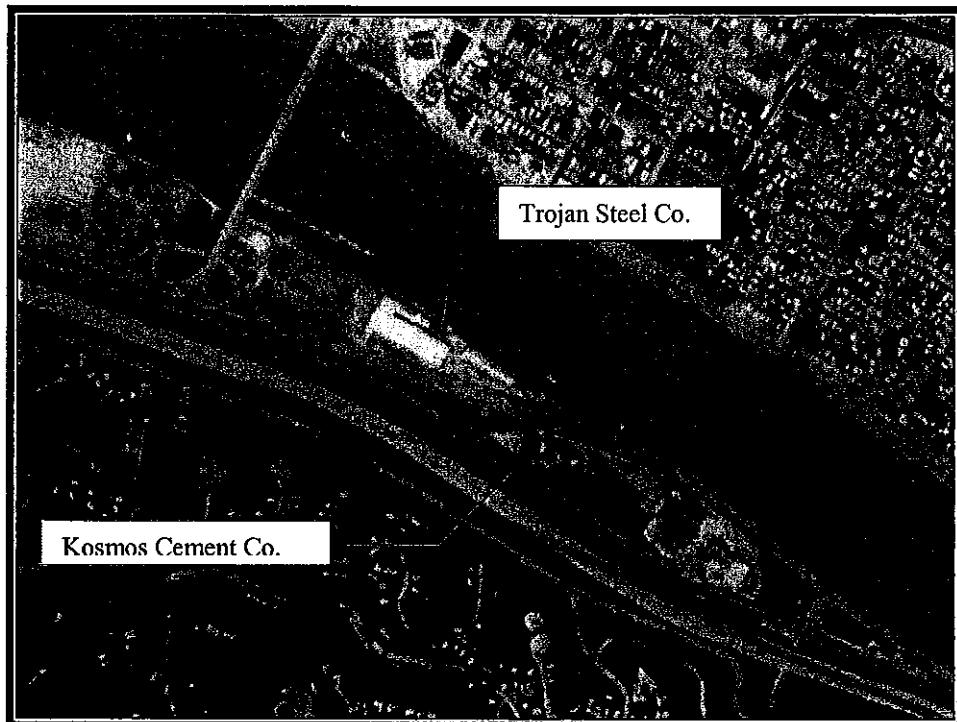
Aerial Photograph 1, 1938



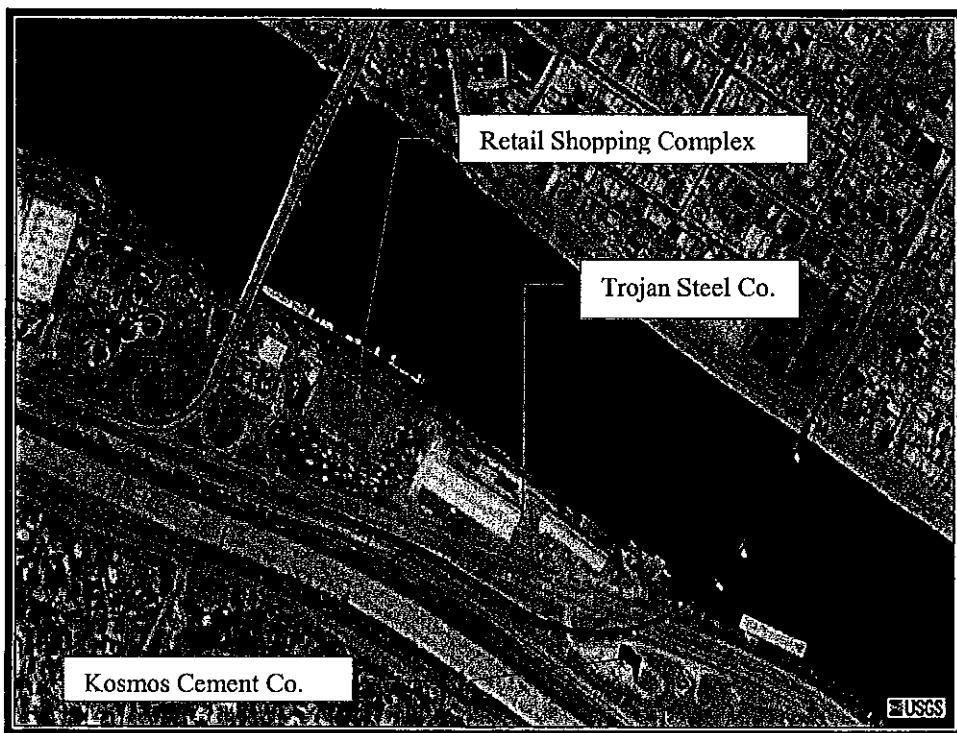
Aerial Photograph 2, 1957



Aerial Photograph 3, 1970



Aerial Photograph 4, 1990



Aerial Photograph 5, 1996

5.3.2 Historical City Directories/Fire Insurance Maps

5.3.2.1 South of Kanawha River

TRIAD contracted with EDR to search their electronic database of Sanborn® fire insurance maps to identify coverage for the Site south of the Kanawha River. On March 23, 2004, EDR reported that there was no coverage available for the Site. TRIAD then reviewed Sanborn® fire insurance maps on March 24, 2004 that were available on microfilm at the Kanawha County Public Library, and identified coverage for the Site for the following dates: 1907, 1912, 1933, 1950, and 1972. The Sanborn® fire insurance maps are included with this Phase I ESA report in **Appendix B, Sanborn® Fire Insurance Maps**. A brief summary of the historic information provided by the Sanborn® fire insurance maps is provided below.

1907:

The Kanawha River Bridge Number 4557 and its associated wood and steel trestle and single rail track are not shown. However, the former Baldwin Steel Company facility was located to the immediate north of the present location of the Kanawha River Bridge, and the Tanners & Dyers Extract Company was located to the immediate south of the present location of the bridge. The Baldwin Steel Company was reportedly closed at this time. The Tanners & Dyers Extract Company apparently was operating at this time and extracted tannic acid from bark and wood delivered to the Site by the C&O.

The *Kanawha County Images, A Bicentennial History, 1788-1988* (1987), which is a published reference, reports the construction of the Kanawha River Bridge Number 4557 was completed in 1907.

1912:

The Kanawha River Bridge is now shown with its associated single rail track. The Baldwin Steel Company and the Tanners & Dyers Extract Company are also depicted.

1933:

The wood and steel trestle is now depicted as such on the Sanborn® map. Starting from west to east, a residential area is located to the immediate south of the C&O double mainline track. The Trojan Steel Company is now operating at the former Baldwin Steel Company location to the immediate north of the Site.

A railroad Water Tower is located between the C&O double mainline track and the Site. A Foundry (referenced as Young's Foundry in *Kanawha County Images*, 1987) is located to the immediate south of the Site at the location of the future Kosmos Cement Company. The Tanners & Dyers Extract Company is no longer present. However, it appears the Evans Wallower Lead Company is now operating at a portion of the former Tanners & Dyers Extract Company property to the south of the Site.

The Evans Wallower Lead Company is identified as being present at this location in a 1927 map published in the *Kanawha County Images* (1987). Several lead furnace locations are noted on the Sanborn® map at this facility.

Except for the Trojan Steel Company property, all of these adjoining property locations would most likely be located hydraulically upgradient of the Site with respect to both surface water and groundwater flow.

1950:

In general, the overall features depicted on the 1933 Sanborn® map are present on the 1950 map, with the following exceptions. An apparent commercial/industrial facility has been constructed to the immediate north of the Site and to the immediate west of the Trojan Steel Company. The name and purpose of this facility was not clear on the map. McCorkle Avenue (Eastern Avenue) has been constructed between the Site and both the unknown facility and the Trojan Steel Company property; however, McCorkle Avenue has not yet been extended beneath the steel trestle portion of the Kanawha River Bridge.

The former Foundry is being used for Storage and Private Auto Repair purposes. The Criss & Shaver Ready Mixed Concrete Plant has been constructed to the immediate east of the former Foundry location. The National Lead Company, Evans Lead Division is now operating the former Evans Wallower Lead Company facility.

1972:

In general, the overall features depicted on the 1950 Sanborn® map are present on the 1972 map, with the following exceptions. The unknown facility has been demolished and replaced by an apparent parking area and structure further to the north of the Site and adjacent to the Kanawha River. The Trojan Steel Company facility has expanded to the west. The residences to the south of the Site and the C&O main line tracks are marked as having been demolished for construction of Interstate I-64. Finally, the railroad Water Tower has been replaced by a structure, which appears to be a warehouse building. (During the site reconnaissance, the remnants of a concrete slab and basement were identified at this location).

MacCorkle Avenue now continues to the east parallel to the Kanawha River and crosses beneath the steel trestle portion of the Kanawha River Bridge. (A plaque installed on a concrete pier notes that MacCorkle Avenue was constructed in 1956). The Marquette Cement Manufacturing Company now occupies the locations of the former Foundry, Storage and Private Auto Repair facility, and the Criss & Shaver Ready Mixed Concrete Plant. Three cement silos, having a capacity of 62,000 barrels, have been constructed at the Marquette Cement Manufacturing Company facility.

Finally, the National Lead Company facility is still operational. Based on the aerial photographs, the National Lead Company had been demolished and removed from the Site between 1972 and 1990 and Elementis Specialties, Inc., a pharmaceutical manufacturer, now occupies a portion of the former National Lead Company property.

5.3.2.2 North of Kanawha River

TRIAD contracted with EDR to search their electronic database of Sanborn® fire insurance maps to identify coverage for the Site. On May 6, 2004, EDR reported that there was coverage available for the Site to the north of the Kanawha River for the following dates: 1922, 1933, 1950, and 1972. The Sanborn® fire insurance maps are included with this Phase I ESA report in **Appendix B, Sanborn® Fire Insurance Maps**. A brief summary of the historic information provided by the Sanborn® fire insurance maps is provided below.

1922:

Sanborn® coverage for 1922 is available for only the northernmost portion of the Site between 3rd Avenue and Madison Avenue. Land use in the Site vicinity is generally undeveloped and is primarily residential. A service station is located on Central Avenue approximately 150-feet from the Site. A Contractor's Shed is depicted adjacent to the Site to the east between Main Street and Central Avenue. The 1922 Sanborn® map describes the tracks as a "wooden trestle" at an elevation of 25-feet.

1933:

The Kanawha River Bridge and its associated wood and steel trestle and single rail track are identified within the coverage area in 1933. Land-use in the vicinity of the Site is primarily residential. The service station depicted on the 1922 map is now described as an auto repair shop, and the contractor's shed is described as a "shed." A private garage is located on Main Street approximately 150-feet to the east of the Site. A filling station is located to the west of the Site at the intersection of Main Street and Florida Avenue. A foundry is located adjacent to the Site to the west, also on Main Street. A warehouse is located approximately 50-feet northwest of the Site on Sillman Avenue (now 6th Avenue).

1950:

The Kanawha River Bridge is shown with its associated single rail track. Land-use in the vicinity of the Site is primarily residential. The filling station and foundry depicted on the 1933 map are still present along Central Avenue; however, a diagonal cross-street across the 420 block has been constructed. A beer bottling facility adjacent to the Site to the east on Main Street had replaced the "shed" and a pie and cake bakery has replaced half of the private garage. The warehouse is still present on Sillman Avenue.

A Motor Sales and Service shop is now located approximately 150-feet to the west of the Site on Central Avenue. A Tin Shop and Truck Service Station are located approximately 50-feet to the west of the Site on Main Street. A Paint and Glass Warehouse and a wholesale plastic sales facility are located to the east of the Site on Central Avenue.

1972:

The Kanawha River Bridge is shown with its associated single rail track. Land use in the Site vicinity is primarily residential. The 1972 Sanborn® map is of poorer quality than previous maps; however, it appears that the service station is still present. The foundry is no longer present and portions of the building have been removed/replaced. The beer bottling facility has been replaced by a Machine Shop. Facility descriptions at the Pie and Cake Bakeries are not legible. The Truck Service Station and the Paint and Glass Warehouse are still present. A description at the wholesale plastic facility is also not legible.

5.4 Other Historical Use Information

As published in the *Kanawha County Images, A Bicentennial History, 1788 – 1988* (1987), in addition to use for rail transportation by the C&O Railroad, the Kanawha River Bridge was also used for local intercity streetcar passenger services from 1908 through mid-1939. Initially, the Charleston Traction Company began using the bridge in 1908 to provide passenger streetcar service between Charleston and South Charleston, West Virginia. In 1912, the South Charleston streetcar line was extended further west to St. Albans, West Virginia and the successor company, the Charleston Interurban Railroad Company provided service between Charleston, South Charleston, and St. Albans until it was placed into receivership in 1933. Finally, its successor company, the Charleston Transit Company continued to use the Kanawha River Bridge to provide local streetcar passenger service between Charleston, South Charleston, and St. Albans until local intercity streetcar service ended in mid-1939.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

Gregory E. Tieman, P.G., L.R.S. and Julie C. Schaer of TRIAD were the *environmental professionals* who performed the Site reconnaissance for the southern portion of the Site on March 16, 2004. Gregory E. Tieman, P.G., L.R.S. performed the Site reconnaissance for the northern portion of the Site on April 24, 2004. Prior to performing the site reconnaissance activities, Greg Tieman performed a “CSX On-Track Safety Job Briefing.” Both environmental professionals have up-to-date Federal Railway Administration (FRA) Roadway Worker Training. In addition, both *environmental professionals* have up-to-date OSHA HAZWOPER 40-hour and 8-hour annual refresher training and are involved in an annual medical monitoring program. Finally, Mr. Tieman

has completed 8-hour OSHA HAZWOPER Supervisor's Training. Resumes for both *environmental professionals* are provided in this report in **Appendix C, Environmental Professional Resumes**.

As part of the Site reconnaissance activities, TRIAD obtained digital photographs of the Site and the immediately adjoining properties to document current on-Site and adjoining off-Site conditions and use. These photographs are included in this report in **Appendix D, Site Photographs**.

The weather at the time of the site reconnaissance activities was cold with cloudy skies. The *environmental professionals* physically inspected the ground surface of the Site, beginning with its terminus at the Kanawha River and working their way to the west with its terminus at the rail yard in South Charleston. Likewise, the northern portion of the Site was inspected beginning with its terminus at the Kanawha River and working to the north. The *environmental professionals* did not walk on the elevated wood and steel trestle; however, they were able to observe this structure from the ground surface. In addition, the *environmental professionals* did not come within 25-feet of the active CSX Transportation, Inc. double mainline track or the Norfolk Southern Corporation single mainline track. The *environmental professionals* then visually observed the immediately adjoining properties from either property boundaries or public roads. Finally, the *environmental professionals* performed a "windshield survey" of adjacent properties to determine whether "Orphan Sites" might be present.

6.2 General Site Setting

As discussed previously, the ground surface beneath the treated wood and painted steel trestle is relatively flat-lying and gently sloping. The portions of the Site nearest to the Kanawha River are located within the 100-year and 500-year flood plains of the Kanawha River. Surface water runoff from both the northern and southern portions of the Site is to the Kanawha River via overland runoff and/or subgrade piping. Ground cover is generally well-maintained and consists of vegetation and asphalt.

6.3 Exterior Observations

The following on-Site and off-Site visual observations were made during the physical inspection of the Site:

- *Storage Tanks.* There was no evidence of either underground or above ground storage tanks (USTs and ASTs) or associated vent pipes, fill pipes, or access ways.
- *Odors.* There were no strong, pungent, or noxious odors observed.
- *Pools of Liquid.* There were no pools of liquid observed that would be indicative of *hazardous substances* or *petroleum products*. Standing surface water was observed beneath the wood trestles of the southern portion of the Site. This

appeared to be present due to storm water runoff from adjoining and adjacent property to the south.

- *Drums.* Thirty-four, 55-gallon drums were stored on wood pallets immediately to the north of the southern portion of the Site and adjacent to MacCorkle Avenue. These drums do not appear to be located within the boundaries of the Site or on the CSX Transportation, Inc. ROW, based on the Site boundaries shown on **Figure 2, Site Boundaries.** Eighteen of the drums were not labeled. Sixteen of the 55-gallon drums were labeled “METgrit®, ferrous abrasive, Non-Hazardous.” The manufacturer of this material was noted on the drums labels as:

Chesapeake Specialty Products
5055 North Point Boulevard
Baltimore, Maryland 21219
(410) 388-5055

These drums also had a November 2002 inspection date noted. The apparent generator of this material was noted on the drums as:

L&M Lignos Enterprise
P.O. #Patrick Street Bridge
METgrit 25 Drums

Based on discussions with a local business representative, we understand these drums were placed at this location by a contractor who is cleaning and painting the Patrick Street Bridge, which is located approximately 1,000-feet to the west of the Site. The Patrick Street Bridge crosses the Kanawha River downgradient from the Site, and has been undergoing renovation beginning in 2002 through the present. The Patrick Street Bridge is readily visible on both the historic aerial photographs and Sanborn® fire insurance maps.

- *Hazardous Substance and Petroleum Products Containers.* No hazardous substance or petroleum products containers were observed. However, an old rusted 55-gallon drum was noted in the brush at the approximate eastern terminus of the Site at the south bank of the Kanawha River. This container was unlabeled and obviously very old, and did not contain any material.
- *Unidentified Substance Containers.* No unidentified substance containers observed.
- *PCBs.* There was no evidence of electrical or hydraulic equipment known to contain PCBs or likely to contain PCBs observed.
- *Pits, Ponds, or Lagoons.* There was no evidence of pits, ponds, or lagoons.

- *Stained Soil or Pavement.* There was no evidence of stained soil or pavement indicative of *hazardous substances or petroleum products*.
- *Stressed Vegetation.* There was no evidence of stressed vegetation. Surface soil was disturbed in the area of the adjoining off-Site “METgrit®” drum storage area; however, this was due to vehicle disturbance and does not appear to be indicative of *hazardous substances or petroleum compounds*. In addition, surface soil was disturbed at the northern terminus of the Site at the Norfolk Southern Corporation single mainline track, which may have been associated with removal of track at this location.
- *Solid Waste.* There was no evidence of trash or other disposal activities. However, a small amount of miscellaneous debris (e.g., roadside trash, rusted 55-gallon drum) is present at various miscellaneous locations at the Site.
- *Waste Water.* Elementis Specialties, Inc. has been issued NPDES Permit Number WV0051560 for Outfall 2. The discharge location is into the Kanawha River immediately upgradient of the Site.
- *Wells.* There was no evidence of dry wells, irrigation wells, injection wells, abandoned wells, or other wells observed.
- *Septic Systems.* There was no evidence of septic systems observed.

6.4 Interior Observations

There were no enclosed structures present at the Site; therefore, visual observation and inspection of interior areas is not applicable to this Phase I ESA. Only the exterior portions of the adjoining properties were visually observed; therefore, visual observation and inspection of off-Site interior areas is also not applicable to this Phase I ESA.

7.0 INTERVIEWS

7.1 Interview with Owner

Prior to the site reconnaissance, CSX Real Property, Inc. reported that the Site was being evaluated for a potential donation to the City of Charleston in conjunction with the development of a Rails-to-Trails recreational facility.

7.2 Interview with Site Manager

An interview with a site manager was not applicable to this Phase I ESA.

7.3 Interviews with Occupants

An interview with occupants of the Site was not applicable to this Phase I ESA.

7.4 Interviews with Local Government Officials

Based on the nature of the Site and the overall quality of the historic use information, TRIAD elected not to interview local government officials.

7.5 Interviews with Others

TRIAD spoke with a local business owner regarding the 34 drums stored on pallets between the Site and MacCorkle Avenue. This individual reported that he understood the drums held "blasting grit" recently generated during the cleaning and painting of the Patrick Street Bridge. This individual was concerned regarding the potential for lead-based paint to be associated with the cleaning activities.

8.0 FINDINGS

Based on the results of the Phase I ESA investigations performed at the Kanawha River Bridge No. 4557, PIN Numbers 54039 0087, 54039 0174, 54039 0175, and 54039 0176 CSX Transportation, Inc., the following known or suspect *recognized environmental conditions* may be associated with the Site:

Historical Recognized Environmental Conditions

No evidence of *recognized environmental conditions* was observed at the Site. However, *historical recognized environmental conditions* may potentially be present at the Site potentially associated with the historic land-use at the following former adjoining and adjacent properties:

- Evans Wallower Lead Company and the National Lead Company, Evans Lead Division facility, Young's Foundry, Baldwin Steel Company and Trojan Steel Company, Tanners & Dyers Extract Company, an auto repair facility, and a beer bottling and machine shop facility.
- Former USTs and LUSTs at various facilities, including the Kosmos Cement Company, Rheox, Inc., Elementis Specialties, Inc., Birch Moving & Storage, Capital Beverage Company, and Florida Street Sunoco.

It should be noted that there is no evidence that any of these former facilities have impacted environmental quality at the Site. These former historic land-uses have only been identified as potentially representing a *historical recognized environmental conditions* due to their history, proximity to the Site, or potential hydraulic relationship to the Site.

9.0 OPINION

Based on the results of the Phase I ESA investigations, it is our professional opinion that *historical recognized environmental conditions* may be associated with industrial and commercial land-use at former adjoining and adjacent properties.

10.0 CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I Environmental Site Assessment in general accordance with the scope and limitations of ASTM Practice E 1527-00 at the Kanawha River Bridge Number 4557, CSX Transportation, Inc. PIN Numbers 54039 0087, 54039 0174, 54039 0175, and 54039 0176 site (the Site). Any exceptions to, or deletions from, this practice are described in section 11.0 of this report. This assessment has revealed potential evidence of *historical recognized environmental conditions* in connection with the property as follows:

- Evans Wallower Lead Company and the National Lead Company, Evans Lead Division facility, Young's Foundry, Baldwin Steel Company and Trojan Steel Company, Tanners & Dyers Extract Company, an auto repair facility, and a beer bottling and machine shop facility.
- Former USTs and LUSTs at various facilities, including the Kosmos Cement Company, Rheox, Inc., Elementis Specialties, Inc., Birch Moving & Storage, Capital Beverage Company, and Florida Street Sunoco.

It should be noted that there is no evidence that any of these former facilities have impacted environmental quality at the Site. These former historic land-uses have only been identified as potentially representing a *historical recognized environmental conditions* due to their history, proximity to the Site, or potential hydraulic relationship to the Site.

11.0 ADDITIONAL SERVICES

No additional services have been performed as part of the Phase I ESA work activities except for providing a recommendation for Phase II Environmental Site Assessment investigations.

12.0 REFERENCES

Cohen, S. and R. Andre, *Kanawha County Images, A Bicentennial History, 1788-1988*, 1987.

CSX Transportation, Inc., *Proposed Sale of Bridge No. 4557* map, 2003.

Environmental Data Resources, Inc., *The EDR Radius Map with GeoCheck®, Kanawha River Bridge, Kanawha River, Charleston, WV 25303*, March 16, 2004.

Sanborn® Fire Insurance Maps, Historic fire insurance maps, 1907, 1912, 1922, 1933, 1950, and 1972.

United States Department of Agriculture, Historic aerial photographs, 1938, 1957, 1970, 1990, and 1996.

United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Kanawha County, West Virginia*, 1981.

United States Department of the Interior, United States Geological Survey, *Charleston West, W. VA. 7.5-minute topographic quadrangle map*, 1958 (photorevised 1971 and 1976).

West Virginia Geologic Survey, *County Survey Report, Kanawha County*, 1912.

Price, P., West Virginia Geological and Economic Survey, *Geologic Map of West Virginia*, 1968

APPENDIX A
EDR Records Review Report
(North of Kanawha River)



EDR™ Environmental
Data Resources Inc

The EDR Radius Map™ Report

Northern Portion/Kanawha Bridge/4557
Northern Portion/Kanawha Bridge/4557
Charleston, WV 25302

Inquiry Number: 01181708.1r

**The Standard in
Environmental Risk
Management Information**

440 Wheelers Farms Road
Milford, Connecticut 06460

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary.....	ES1
Overview Map.....	2
Detail Map.....	3
Map Findings Summary.....	4
Map Findings.....	6
Orphan Summary.....	89
Government Records Searched/Data Currency Tracking.....	GR-1

GEOCHECK ADDENDUM

GeoCheck - Not Requested

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This report contains information obtained from a variety of public and other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL EDR BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. It can not be concluded from this report that coverage information for the target and surrounding properties does not exist from other sources. Any analyses, estimates, ratings or risk codes provided in this report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Any liability on the part of EDR is strictly limited to a refund of the amount paid for this report.

Copyright 2004 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

NORTHERN PORTION/KANAWHA BRIDGE/4557
CHARLESTON, WV 25302

COORDINATES

Latitude (North):	38.365675 - 38° 21' 56.4"
Longitude (West):	81.659655 - 81° 39' 34.8"
Universal Tranverse Mercator:	Zone 17
UTM X (Meters):	442371.1
UTM Y (Meters):	4246388.0
Elevation:	600 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property:	38081-C6 CHARLESTON WEST, WV
Source:	USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL.....	National Priority List
Proposed NPL.....	Proposed National Priority List Sites
CERC-NFRAP.....	CERCLIS No Further Remedial Action Planned
CORRACTS.....	Corrective Action Report
RCRIS-TSD.....	Resource Conservation and Recovery Information System
RCRIS-LQG.....	Resource Conservation and Recovery Information System

STATE ASTM STANDARD

SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

EXECUTIVE SUMMARY

SWF/LF..... List of M.S.W. Landfills/Transfer Station Listing

FEDERAL ASTM SUPPLEMENTAL

CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
Delisted NPL	National Priority List Deletions
HMIRS	Hazardous Materials Information Reporting System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index File
NPL Liens	Federal Superfund Liens
PADS	PCB Activity Database System
FUDS	Formerly Used Defense Sites
INDIAN RESERV	Indian Reservations
US BROWNFIELDS	A Listing of Brownfields Sites
DOD	Department of Defense Sites
RAATS	RCRA Administrative Action Tracking System
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
SSTS	Section 7 Tracking Systems

STATE OR LOCAL ASTM SUPPLEMENTAL

SPILLS..... Spills Listing

BROWNFIELDS DATABASES

US BROWNFIELDS..... A Listing of Brownfields Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASTM STANDARD

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites

EXECUTIVE SUMMARY

which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 02/26/2004 has revealed that there is 1 CERCLIS site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
5TH AVENUE RESPONSE	1701 5TH AVENUE	1/4 - 1/2NW	R74	53

RCRIS: Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month. Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month. Large quantity generators (LQGs): generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste from the generator off-site to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRIS-SQG list, as provided by EDR, and dated 03/09/2004 has revealed that there are 40 RCRIS-SQG sites within approximately 0.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
COYNE TEXTILE SERVICES	1109 MAIN ST	0 - 1/8 E	A2	6
CLEANWAY SYSTEM	1107 W MAIN ST	0 - 1/8 E	A3	6
HEADMASTERS	1104 MAIN ST	0 - 1/8 E	A4	8
RICKS GARAGE	1144 CENTRAL AVE	0 - 1/8 NNE	B6	9
C C COPLEY GARAGE INC	1009 CENTRAL AVE	1/8 - 1/4E	C10	13
CUSTOM WORKS AUTO BODY	516 RUSSELL ST	1/8 - 1/4ENE	17	17
KANAWHA VALLEY REQ TRANSP AUTH	1550 4TH AVE	1/8 - 1/4NW	F20	24
SEARS SERVICE CENTER # 7554	1609 6TH AVE	1/4 - 1/2NNW	I30	29
HOOTEN EQUIPMENT CO INC	961 VIRGINIA ST W	1/4 - 1/2ENE	K34	32
WISEMAN CONST	1616 6TH AVE	1/4 - 1/2NNW	I36	33
JIM AUTOMOTIVE	1622 6TH AVE	1/4 - 1/2NNW	I37	33
UNITED TECHNOLOGIES	1626 SIXTH AVE	1/4 - 1/2NNW	I38	34
US PRINT	810 VIRGINIA ST W	1/4 - 1/2E	L44	38
SERVICE OFFICE SUPPLY	811 VIRGINIA ST	1/4 - 1/2E	L45	39
CITY OF CHARLESTON FIRE DEPT #	808 VIRGINIA ST WEST	1/4 - 1/2E	L46	40
MEINEKE	821 WEST WASHINGTON ST	1/4 - 1/2ENE	N61	43
F M PILE HARDWARE CO	1625 W WASHINGTON ST	1/4 - 1/2NNW	U81	59
SUPERIOR LAUNDRY COMPANY	622 VA ST WEST	1/2 - 1 ESE	91	64
PATHOLOGY ASSOCIATES LTD	511 CENTRAL AVE	1/2 - 1 ESE	X97	72
NATIONAL UNIFORM SERVICE	621 W WASHINGTON ST	1/2 - 1 E	Z103	76
UNITED DAIRY INCORPORATED VALL	508 ROANE ST.	1/2 - 1 ESE	AA106	80

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TOTAL COMFORT HEATING & COOLIN	1207 2ND AVE	0 - 1/8 SSE	5	9
EXXON RAS #29499	1401 KANAWHA BLVD W	1/8 - 1/4SW	D11	13
HAMILTON BUSINESS SYSTEMS	1418 KANAWHA BLVD W	1/8 - 1/4WSW	D14	15
PROPERTY PROTECTION CO	1506 KANAWHA BLVD	1/8 - 1/4WSW	E18	19
MOUNTAINS MATERIAL HANDLING IN	307 STOCKTON ST	1/4 - 1/2WNW	23	25
DAVID CROWN ENTERPRISE	1605 4TH AVE	1/4 - 1/2NW	G26	27
INTERSTATE RADIATOR & LAWMOWE	1611 4TH AVE	1/4 - 1/2NW	G27	27
MOUNTAINEER GAS CO	501 STOCKTON ST	1/4 - 1/2NW	H29	28

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
HOBART SALES & SERVICE	1637 4TH AVE	1/4 - 1/2NW	J31	29
BUD YOUNG AUTO PARK	1646 4TH AVE	1/4 - 1/2NW	J39	34
BLACK & DECKER	1638 6TH AVE	1/4 - 1/2NNW	I41	35
MIDAS MUFFLER	1656 FOURTH AVE	1/4 - 1/2NW	J43	38
KMART	1701 FOURTH AVE W	1/4 - 1/2NW	Q69	50
PENSKE AUTO CENTER	1701 4TH AVE W SITE	1/4 - 1/2NW	Q70	50
AL MARINO INC	1653 FOURTH AVE	1/4 - 1/2NW	Q71	50
CHARLESTON MARINE INC	1601 BOWNE AVE	1/2 - 1	WSW 88	62
WHITE DODGE INC	1738 4TH AVE	1/2 - 1	NW W93	67
VIRGINIA WELDING SUPPLY CO	ONE OREGON ST	1/2 - 1	NW W94	68
LUCAS, ALLEN NISSAN PONTIAC IN	215 DELAWARE AV	1/2 - 1	ESE Y99	73

ERNS: The Emergency Response Notification System records and stores information on reported releases of oil and hazardous substances. The source of this database is the U.S. EPA.

A review of the ERNS list, as provided by EDR, and dated 12/31/2003 has revealed that there are 15 ERNS sites within approximately 0.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M47	40
KANAWHA RIVER MILE 68	KANAWHA RIVER MILE 68	1/4 - 1/2SW	M48	40
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M49	40
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M50	41
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M51	41
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M52	41
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M53	41
KANAWHA RIVER VINE STREET	KANAWHA RIVER VINE STRE	1/4 - 1/2SW	M54	41
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M55	41
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M56	42
KANAWHA RIVER MILE 50	KANAWHA RIVER MILE 50	1/4 - 1/2SW	M57	42
KANAWHA RIVER	KANAWHA RIVER	1/4 - 1/2SW	M58	42
KANAWHA RIVER MILE 61.5	KANAWHA RIVER MILE 61.5	1/4 - 1/2SW	M59	42
KANAWHA RIVER MP 58	KANAWHA RIVER MP 58	1/4 - 1/2SW	M60	42
1701 5TH AVE , BOX 5	1701 5TH AVE , BOX 5	1/4 - 1/2NW	R76	54

STATE ASTM STANDARD

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Commerce, Labor & Environmental Resources' Leaking Underground Storage Tanks database.

A review of the LUST list, as provided by EDR, and dated 12/23/2003 has revealed that there are 19 LUST sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CHECKWAY FOOD MART	1401 4TH AVE	0 - 1/8	NNW 8	11
KANAWHA VALLEY REGIONAL TRANS	1550 4TH AVE PO BOX 118	1/8 - 1/4NW	F19	20
PRIMA STORE # 5400	841 W WASHINGTON ST	1/4 - 1/2ENE	42	36
FIRE STATION 2	800 VIRGINIA ST W	1/4 - 1/2E	P64	44
FORMER DAIRY QUEEN	817 WASHINGTON ST	1/4 - 1/2ENE	N66	46
GO MART #013	1703 7TH AVE	1/2 - 1	NNW 89	62

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
NATIONAL LINEN SERV PROPERTY VALLEY BELL DAIRY CO	621 W WASHINGTON ST 508 ROANE ST	1/2 - 1 E 1/2 - 1 ESE	Z104 AA105	76 77
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
BOULEVARD EXXON ONE STOP #514	1402 KANAWHA BLVD W	1/8 - 1/4 SW	D13	15
B & J TRUCKING	4TH AVE AND STOCKTON ST	1/4 - 1/2 NW	F24	25
ELEMENTIS SPECIALTIES INC	1003 MAC CORKLE AVE SW	1/4 - 1/2 SSW	O62	43
WV TRACTOR & EQUIPMENT	PATRICK ST & NYC RAILRO	1/4 - 1/2 NW	R72	51
NUS INC	607 PATRICK ST	1/4 - 1/2 NW	T80	57
SOUTH CHARLESTON PLANT	PO BOX 8004	1/2 - 1 W	96	69
BERT WOLFE FORD	PATRICK ST PLAZA	1/2 - 1 WNW	107	81
NEIGHBORMART #1	BERKLEY & KANAWHA BLVD	1/2 - 1 SE	108	82
TROJAN STEEL CO	1414 MACCORKLE AVE SW	1/2 - 1 SSE	109	83
BROUGHTON FOODS-CHAS FOODS 11	114 VIRGINIA ST W	1/2 - 1 SE	110	85
LEE & OHIO EXXON DEALER #1004	215 LEE ST W	1/2 - 1 ESE	111	86

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Commerce, Labor & Environmental Resources.

A review of the UST list, as provided by EDR, and dated 04/13/2004 has revealed that there are 43 UST sites within approximately 0.75 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
BIRCH MOVING & STORAGE	1129 MAIN ST	0 - 1/8 ENE	A1	6
FLORIDA ST SUNOCO	1144 CENTRAL AVE	0 - 1/8 NNE	B7	9
CHECKWAY FOOD MART	1401 4TH AVE	0 - 1/8 NNW	8	11
CAPITOL BEVERAGE CO	500 HUNT AVE	1/8 - 1/4 ENE	9	12
KANAWHA VALLEY REGIONAL TRANS	1550 4TH AVE PO BOX 118	1/8 - 1/4 NW	F19	20
TIC TOC TIRE	1001 W WASHINGTON ST	1/4 - 1/2 ENE	K32	30
BARIA TRUCKING CO	977 VIRGINIA ST W	1/4 - 1/2 ENE	K33	31
HOOTEN EQUIPMENT CO	961 VIRGINIA ST W	1/4 - 1/2 ENE	K35	32
PRIMA STORE # 5400	841 W WASHINGTON ST	1/4 - 1/2 ENE	42	36
FIRE STATION 2	800 VIRGINIA ST W	1/4 - 1/2 E	P65	45
FORMER DAIRY QUEEN	817 WASHINGTON ST	1/4 - 1/2 ENE	N66	46
S/S LOC #25998	811 WASHINGTON ST	1/4 - 1/2 ENE	N67	48
VALLEY AIR INC	723 VIRGINIA ST W	1/4 - 1/2 E	77	54
GO-MART STORE 054	W WASHINGTON ST	1/4 - 1/2 E	S78	55
PREISER SCIENTIFIC INC	900 MACCORKLE AVE SW	1/4 - 1/2 WSW	79	56
GO MART #013	1703 7TH AVE	1/2 - 1 NNW	89	62
GARDNER CLEANERS	1666 W WASHINGTON ST	1/2 - 1 NNW	U90	64
BEST BET IN	624 CENTRAL AVE	1/2 - 1 ESE	92	66
HAJOMA CORP	701 WASHINGTON ST W	1/2 - 1 E	Z101	75
CHARLESTON LINEN SERVICE INC	621 W WASHINGTON ST	1/2 - 1 E	Z102	75
NATIONAL LINEN SERV PROPERTY VALLEY BELL DAIRY CO	621 W WASHINGTON ST 508 ROANE ST	1/2 - 1 E 1/2 - 1 ESE	Z104 AA105	76 77
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
BOULEVARD EXXON ONE STOP #514	1402 KANAWHA BLVD W	1/8 - 1/4 SW	D12	14
BOULEVARD CHEVRON #2003	1500 KANAWHA BLVD W	1/8 - 1/4 WSW	E16	16
PATRICK PLAZA DODGE	1909 PATRICK ST	1/4 - 1/2 NW	F22	25
B & J TRUCKING	4TH AVE AND STOCKTON ST	1/4 - 1/2 NW	F24	25

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
KRT/NO FORMS GAH	4TH AVE & STOCKTON STR	1/4 - 1/2NW	F25	26
CHARLESTON SERVICE CENTER	501 STOCKTON ST	1/4 - 1/2NW	H28	27
HOBET CHARLESTON SHOP	1613 KANAWHA BLVD W	1/4 - 1/2W	40	35
ELEMENTIS SPECIALTIES INC	1003 MAC CORKLE AVE SW	1/4 - 1/2SSW O62	43	
RHEOX INC	1003 MAC CORKLE AVE SW	1/4 - 1/2SSW	O63	44
KMART #4188	1701 4TH AVE W	1/4 - 1/2NW	Q68	49
WV TRACTOR & EQUIPMENT	PATRICK ST & NYC RAILRO	1/4 - 1/2NW R72	51	
MOORE'S A DIV OF HARCROS LUMBE	500 PATRICK ST	1/4 - 1/2NW	R73	52
WV TRACTOR & EQUIPMENT	PATRICK ST & 5TH AVE	1/4 - 1/2NW	R75	53
NUS INC	607 PATRICK ST	1/4 - 1/2NW T80	57	
E B BASHAM ET AL	1701 FIFTH AVE	1/4 - 1/2NW	T82	59
SURFACE BANANA CO	5TH AVE	1/4 - 1/2NW	R83	60
KOSMOS CEMENT CO/CHARLESTON TE	1007 MACCORKLE AVE SW	1/4 - 1/2S	V84	61
VIRGINIA WELDING SUPPLY CO	ONE OREGON ST	1/2 - 1 NW	95	68
SOUTH CHARLESTON PLANT	PO BOX 8004	1/2 - 1 W 96	69	
ALLEN LUCAS NISSAN PONTIAC INC	215 DELAWARE AVE	1/2 - 1 ESE	Y98	73
UNKNOW-OUR 55-9655-173/559060-	505 VIRGINIA ST W	1/2 - 1 ESE	X100	73

VCP:Sites involved in the Voluntary Remediation Program.

A review of the VCP list, as provided by EDR, and dated 06/12/2002 has revealed that there is 1 VCP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
KANAWHA TRANSIT	1550 4TH STREET	1/8 - 1/4NW	F21	24

FEDERAL ASTM SUPPLEMENTAL

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/08/2004 has revealed that there are 36 FINDS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
COYNE TEXTILE SERVICES	1109 MAIN ST	0 - 1/8 E	A2	6
CLEANWAY SYSTEM	1107 W MAIN ST	0 - 1/8 E	A3	6
HEADMASTERS	1104 MAIN ST	0 - 1/8 E	A4	8
RICKS GARAGE	1144 CENTRAL AVE	0 - 1/8 NNE	B6	9
C C COPLEY GARAGE INC	1009 CENTRAL AVE	1/8 - 1/4E	C10	13
ST ANTHONY SCHOOL	1027 6TH STREET	1/8 - 1/4E	C15	16
CUSTOM WORKS AUTO BODY	516 RUSSELL ST	1/8 - 1/4ENE	17	17
KANAWHA VALLEY REQ TRANSP AUTH	1550 4TH AVE	1/8 - 1/4NW	F20	24
SEARS SERVICE CENTER # 7554	1609 6TH AVE	1/4 - 1/2NNW	I30	29

EXECUTIVE SUMMARY

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
HOOTEN EQUIPMENT CO INC	961 VIRGINIA ST W	1/4 - 1/2ENE	K34	32
WISEMAN CONST	1616 6TH AVE	1/4 - 1/2NNW	I36	33
JIM AUTOMOTIVE	1622 6TH AVE	1/4 - 1/2NNW	I37	33
UNITED TECHNOLOGIES	1626 SIXTH AVE	1/4 - 1/2NNW	I38	34
US PRINT	810 VIRGINIA ST W	1/4 - 1/2E	L44	38
SERVICE OFFICE SUPPLY	811 VIRGINIA ST	1/4 - 1/2E	L45	39
CITY OF CHARLESTON FIRE DEPT #	808 VIRGINIA ST WEST	1/4 - 1/2E	L46	40
MEINEKE	821 WEST WASHINGTON ST	1/4 - 1/2ENE	N61	43
F M PILE HARDWARE CO	1625 W WASHINGTON ST	1/4 - 1/2NNW	U81	59
STONEWALL JACKSON JR. HIGH	812 PARK AVENUE	1/4 - 1/2ENE	S86	61
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
TOTAL COMFORT HEATING & COOLIN	1207 2ND AVE	0 - 1/8 SSE	5	9
EXXON RAS #29499	1401 KANAWHA BLVD W	1/8 - 1/4SW	D11	13
HAMILTON BUSINESS SYSTEMS	1418 KANAWHA BLVD W	1/8 - 1/4WSW	D14	15
PROPERTY PROTECTION CO	1506 KANAWHA BLVD	1/8 - 1/4WSW	E18	19
MOUNTAINS MATERIAL HANDLING IN	307 STOCKTON ST	1/4 - 1/2WNW	23	25
DAVID CROWN ENTERPRISE	1605 4TH AVE	1/4 - 1/2NW	G26	27
INTERSTATE RADIATOR & LAWMOWE	1611 4TH AVE	1/4 - 1/2NW	G27	27
MOUNTAINEER GAS CO	501 STOCKTON ST	1/4 - 1/2NW	H29	28
HOBART SALES & SERVICE	1637 4TH AVE	1/4 - 1/2NW	J31	29
BUD YOUNG AUTO PARK	1646 4TH AVE	1/4 - 1/2NW	J39	34
BLACK & DECKER	1638 6TH AVE	1/4 - 1/2NNW	I41	35
MIDAS MUFFLER	1656 FOURTH AVE	1/4 - 1/2NW	J43	38
KMART	1701 FOURTH AVE W	1/4 - 1/2NW	Q69	50
PENSKE AUTO CENTER	1701 4TH AVE W SITE	1/4 - 1/2NW	Q70	50
AL MARINO INC	1653 FOURTH AVE	1/4 - 1/2NW	Q71	50
5TH AVENUE RESPONSE	1701 5TH AVENUE	1/4 - 1/2NW	R74	53
KOSMOS CEMENT COMPANY	1007 MACCORKLE AVENUE S	1/4 - 1/2S	V85	61

FTTS: FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act) over the previous five years. To maintain currency, EDR contacts the Agency on a quarterly basis.

A review of the FTTS INSP list, as provided by EDR, and dated 01/21/2004 has revealed that there are 3 FTTS INSP sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
ST ANTHONY SCHOOL	1027 6TH STREET	1/8 - 1/4E	C15	16
STONEWALL JACKSON JR. HIGH	812 PARK AVENUE	1/4 - 1/2ENE	S86	61
STONEWALL JACKSON JR. HIGH SCH	812 PARK AVENUE	1/4 - 1/2ENE	S87	62

PROPRIETARY DATABASES

Former Manufactured Gas (Coal Gas) Sites:

The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative

A review of the Coal Gas list, as provided by EDR, has revealed that there is 1 Coal Gas site within

EXECUTIVE SUMMARY

approximately 1.5 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CHARLESTON GAS LIGHT CO.	21 GOSHORN	1 - 2 SE	112	88

BROWNFIELDS DATABASES

VCP:Sites involved in the Voluntary Remediation Program.

A review of the VCP list, as provided by EDR, and dated 06/12/2002 has revealed that there is 1 VCP site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
KANAWHA TRANSIT	1550 4TH STREET	1/8 - 1/4 NW	F21	24

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
BONHAM ELEMENTARY SCHOOL	FTTS INSP
KANAWHA CCO BOARD OF EDUCATION	FTTS INSP
WV DEPT. OF FINANCE AND ADMINISTRA	FINDS, FTTS INSP
KANAWHA CO BOARD OF ED	FINDS, FTTS INSP
SOUTH CHARLESTON CITY HALL	FTTS INSP
UNION CARBIDE	FTTS INSP
UCC - NORTH CHARLESTON DISTRIBUTIO	FINDS, RCRIS-LQG, RCRIS-TSD, CERC-NFRAP
UNION CARBIDE CORP HOLZ IMPOUNDMEN	RCRIS-SQG, RCRIS-TSD, CORRACTS VCP
CHEVRON 4227 MACCORKLE	CERCLIS, FINDS
WESTERN KANAWHA CTY LANDFILL-AKA-K	CERCLIS, FINDS
SHARON GARNES WELL SITE	CERCLIS, FINDS
SOUTH CHARLESTON MUN LANDFILL	CERC-NFRAP
UNION CARBIDE N STORAGE AREA	CERC-NFRAP
KANAWHA BLOCK	CERC-NFRAP
BLACK ROCK ASPHALT PROPERTY	CERC-NFRAP
SOUTH CHARLESTON WASTE TRTMT WKS	CERC-NFRAP
CRAIG BRANCH DRUM DUMP	CERC-NFRAP
SYCAMORE	SWF/LF
BIG CHIMNEY EXXON #1013	LUST
DARRELL A CARR	LUST, UST
ONE STOP #113	LUST, UST
PRIMA STORE # 5417	LUST
JERRY D EDENS	UST
BIG CHIMNEY EXXON #1013/523	UST
VACANT LOT	UST
GOFF'S CARRY OUT	UST
DRAVO BASIC MATERIALS CO	UST
DANNY'S CUSTODIAL CARE INC	UST
LANHAM TRANS-PROD OFFICE	UST
PJ CASANAVE LAND CLEANING CO	UST
ROYAL OLDSMOBILE AMC RENAULT CO	RCRIS-SQG, FINDS, UST
ROYAL OLDSMOBILE	UST
UNCERTAIN/NO FORMS	UST
FORMER HUMMINGBIRD FLIGHT SERVIC	UST
AMOCO OIL CO	UST
W.Q. WATTERS CO	RCRIS-SQG, FINDS
C & L TRANSMISSION	RCRIS-SQG, FINDS
KELLERS INCORPORATED	RCRIS-SQG, FINDS
DUNCAN JOHNNIE	RCRIS-SQG, FINDS
WVDOH - NO CHARLESTON HDQTS	RCRIS-SQG, FINDS
SOUTH CHARLESTON SEWAGE TREATMENT	RCRIS-SQG, FINDS
SUPER AMERICA #5222	RCRIS-SQG
WVDOH - PATRICK STREET BRIDGE	FINDS, RCRIS-LQG
CGST LINE SM-80 UTAH HOLLOW	FINDS, RCRIS-LQG
MM 40 KANAWHA RIVER	ERNS
MM 59.0 KANAWHA RIVER	ERNS
MM 59.0 KANAWHA RIVER	ERNS
MM 61 TO 62 ON THE KANAWHA RIVER	ERNS
BAKER OIL MM82 KANAWHA RIVER	ERNS
BRIDGE ROAD AND WALNUT STREET	ERNS
HOLMES BRANCH OF KANAWHA 2 MILE	ERNS
KANAWHA BLVD BRIDGE	ERNS
MILE 60.5 LEFT DESCENDING BANK KAN	ERNS
MILE 47 KANAWHA RIVER	ERNS
MILES 31.1 ON THE KANAWHA RIVER	ERNS
95 MACCORKLE AVN SW MM 54.1 ON THE	ERNS
TECHNICAL CENTER KANAWHA TURNPIKE	ERNS
UNION CARBIDE CHEMICALS OUTFALL CO	ERNS

OVERVIEW MAP - 01181708.1r - Triad Engineering Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property

▲ Coal Gasification Sites

 National Priority List Sites

 Landfill Sites

 Dept. Defense Sites

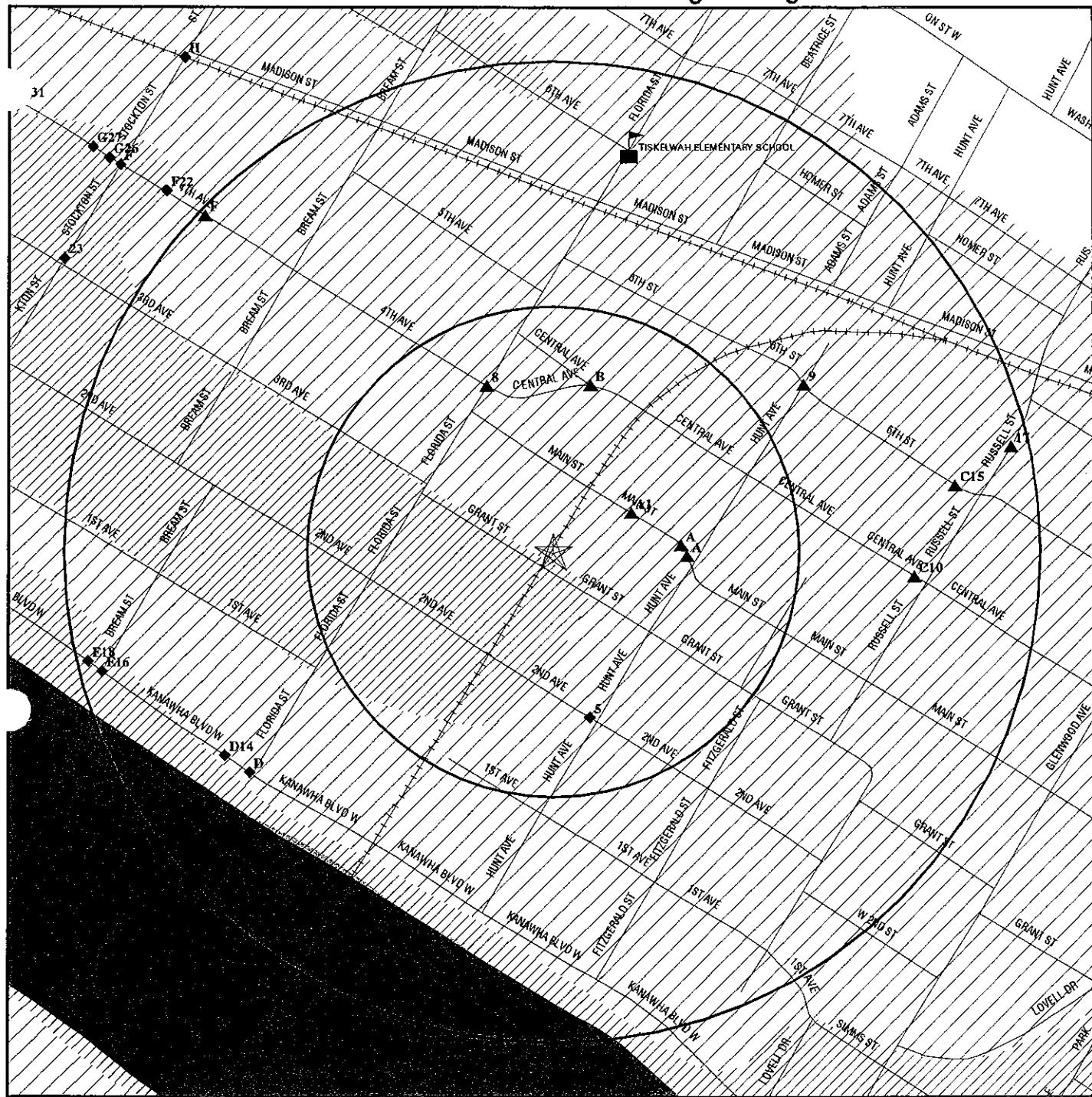
-  Indian Reservations BIA
-  Oil & Gas pipelines
-  100-year flood zone
-  500-year flood zone
-  Federal Wetlands

TARGET PROPERTY:
ADDRESS:
CITY/STATE/ZIP:
LAT/ LONG:

Northern Portion/Kanawha Bridge/4557
Northern Portion/Kanawha Bridge/4557
Charleston WV 25302
38 3657 / 81 6597

CUSTOMER: Triad Engineering Inc.
CONTACT: Julie Schaer
INQUIRY #: 01181708.1r
DATE: April 30, 2004 7:46 am

DETAIL MAP - 01181708.1r - Triad Engineering Inc.



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Coal Gasification Sites
- Sensitive Receptors
- National Priority List Sites
- Landfill Sites
- Dept. Defense Sites

- Indian Reservations BIA
- △ Oil & Gas pipelines
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- ▨ Federal Wetlands

TARGET PROPERTY:	Northern Portion/Kanawha Bridge/4557	CUSTOMER:	Triad Engineering Inc.
ADDRESS:	Northern Portion/Kanawha Bridge/4557	CONTACT:	Julie Schaer
CITY/STATE/ZIP:	Charleston WV 25302	INQUIRY #:	01181708.1r
LAT/LONG:	38.3657 / 81.6597	DATE:	April 30, 2004 7:47 am

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>FEDERAL ASTM STANDARD</u>								
NPL		1.500	0	0	0	0	0	0
Proposed NPL		1.500	0	0	0	0	0	0
CERCLIS		1.000	0	0	1	0	NR	1
CERC-NFRAP		0.750	0	0	0	0	NR	0
CORRACTS		1.500	0	0	0	0	0	0
RCRIS-TSD		1.000	0	0	0	0	NR	0
RCRIS Lg. Quan. Gen.		0.750	0	0	0	0	NR	0
RCRIS Sm. Quan. Gen.		0.750	5	6	21	8	NR	40
ERNS		0.500	0	0	15	NR	NR	15
<u>STATE ASTM STANDARD</u>								
State Haz. Waste		N/A	N/A	N/A	N/A	N/A	N/A	N/A
State Landfill		1.000	0	0	0	0	NR	0
LUST		1.000	1	2	7	9	NR	19
UST		0.750	3	4	25	11	NR	43
VCP		1.000	0	1	0	0	NR	1
<u>FEDERAL ASTM SUPPLEMENTAL</u>								
CONSENT		1.500	0	0	0	0	0	0
ROD		1.500	0	0	0	0	0	0
Delisted NPL		1.500	0	0	0	0	0	0
FINDS		0.500	5	7	24	NR	NR	36
HMIRS		0.500	0	0	0	NR	NR	0
MLTS		0.500	0	0	0	NR	NR	0
MINES		0.750	0	0	0	0	NR	0
NPL Liens		0.500	0	0	0	NR	NR	0
PADS		0.500	0	0	0	NR	NR	0
FUDS		1.000	0	0	0	0	NR	0
INDIAN RESERV		1.500	0	0	0	0	0	0
US BROWNFIELDS		1.000	0	0	0	0	NR	0
DOD		1.500	0	0	0	0	0	0
RAATS		0.500	0	0	0	NR	NR	0
TRIS		0.500	0	0	0	NR	NR	0
TSCA		0.500	0	0	0	NR	NR	0
SSTS		0.500	0	0	0	NR	NR	0
FTTS		0.500	0	1	2	NR	NR	3
<u>STATE OR LOCAL ASTM SUPPLEMENTAL</u>								
SPILLS		0.500	0	0	0	NR	NR	0
<u>EDR PROPRIETARY HISTORICAL DATABASES</u>								
Coal Gas		1.500	0	0	0	0	1	1

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>BROWNFIELDS DATABASES</u>								
US BROWNFIELDS		1.000	0	0	0	0	NR	0
VCP		1.000	0	1	0	0	NR	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.